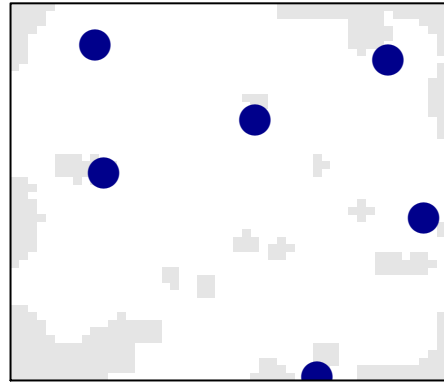
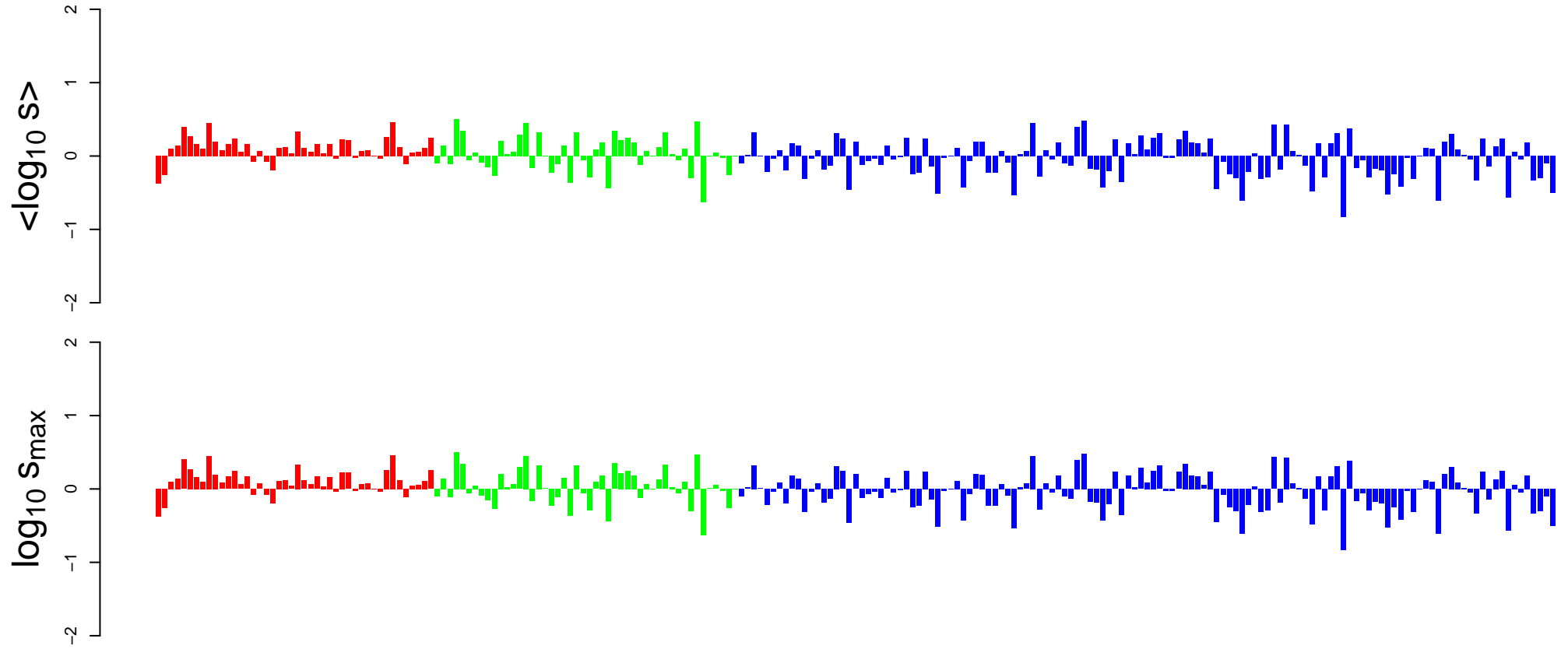


# Biotin metabolism

all genes

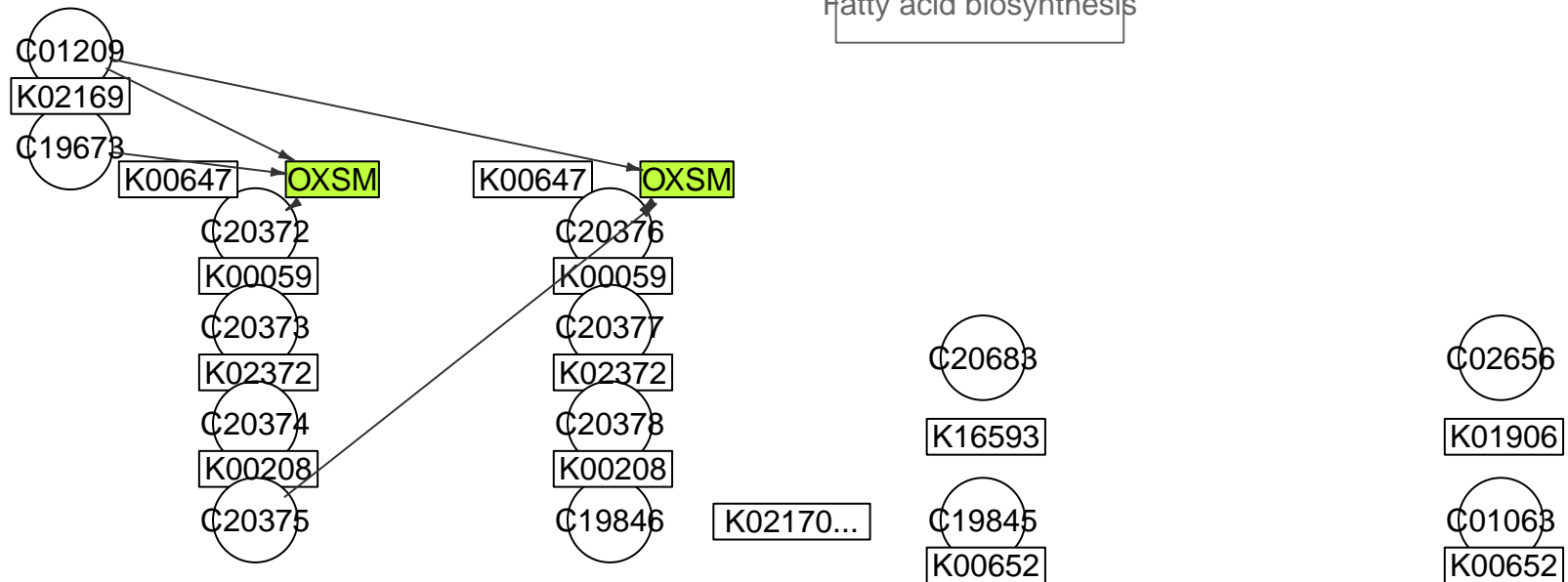


maximum = 1



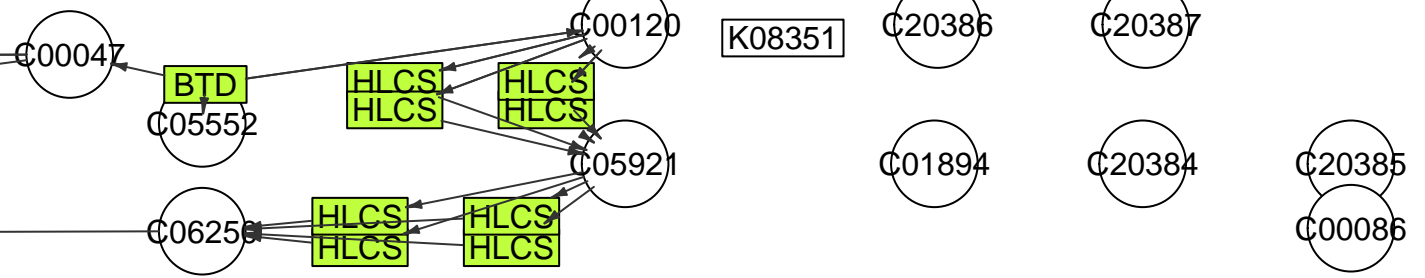
Biotin metabolism  
(genes with data)

Fatty acid biosynthesis



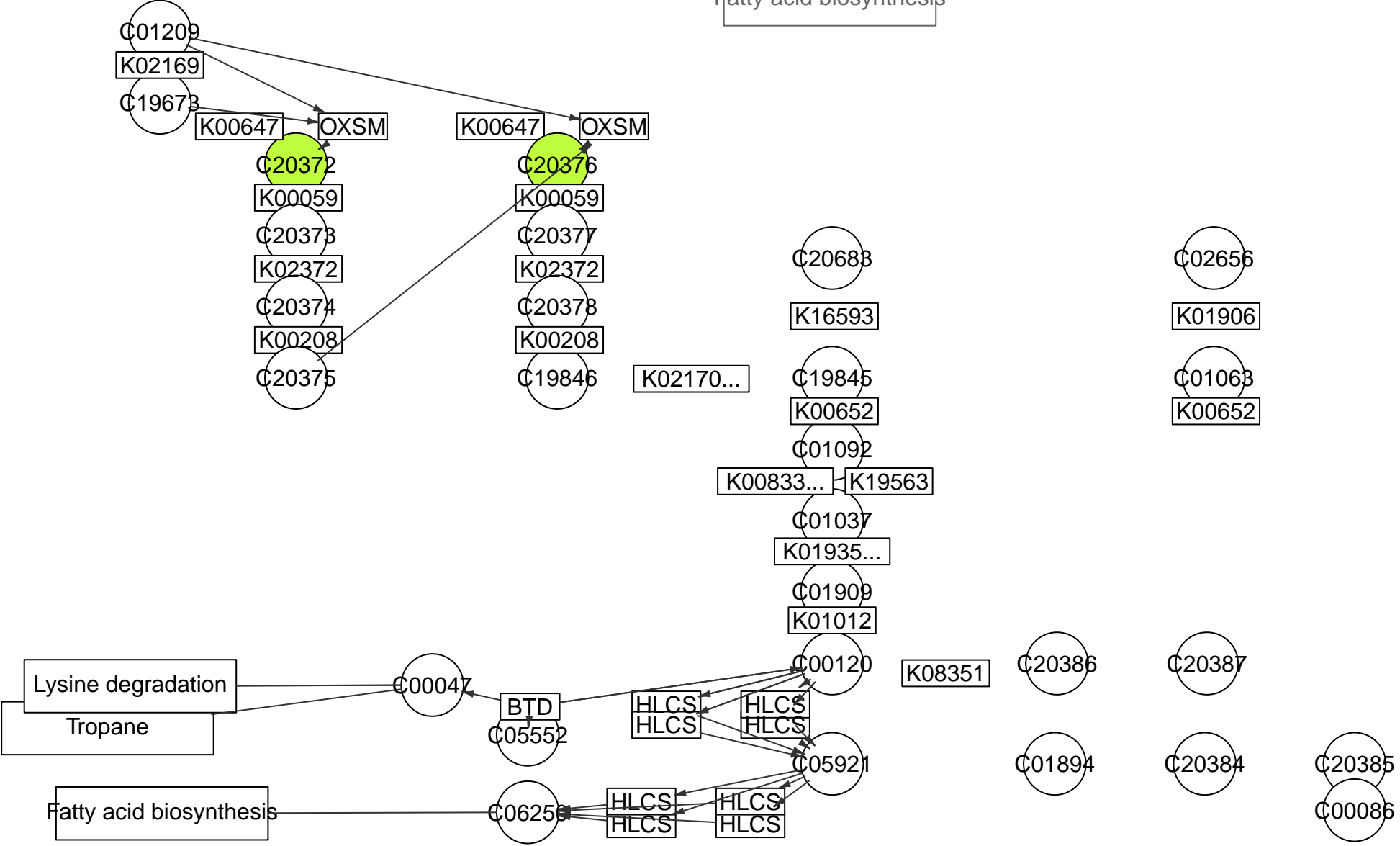
Lysine degradation  
Tropane

Fatty acid biosynthesis



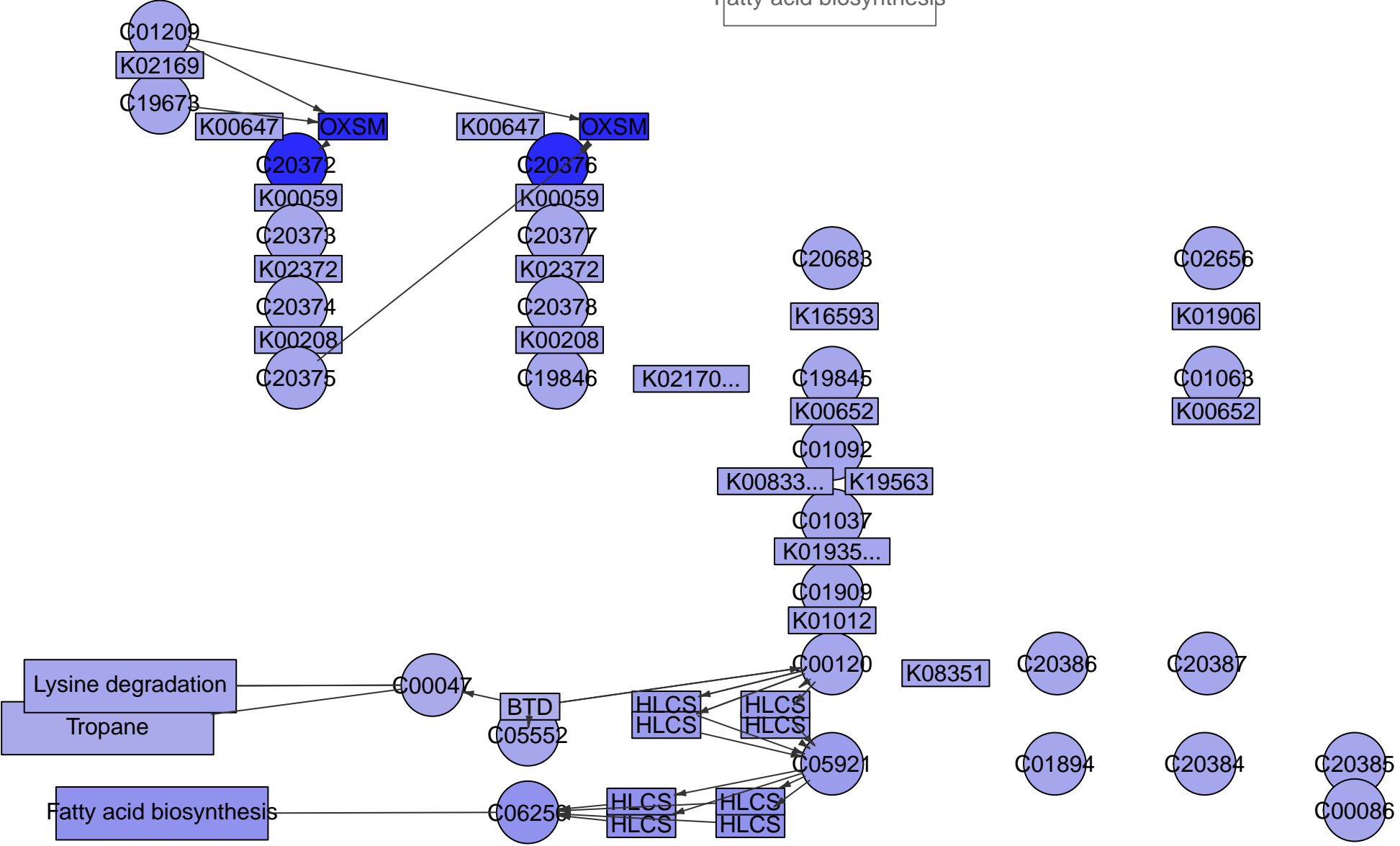
Biotin metabolism  
(sink nodes)

Fatty acid biosynthesis



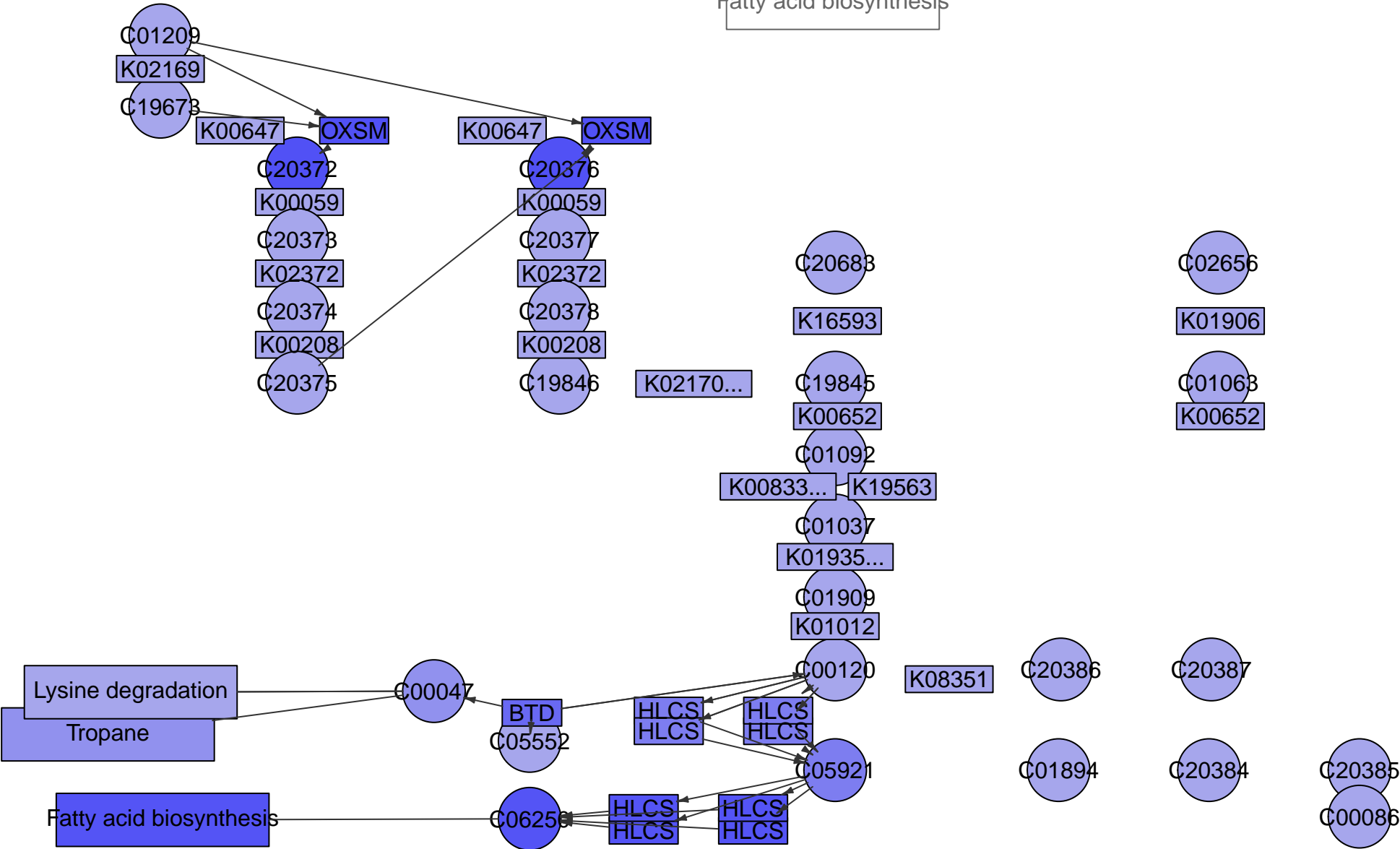
Biotin metabolism  
MPI-001

Fatty acid biosynthesis



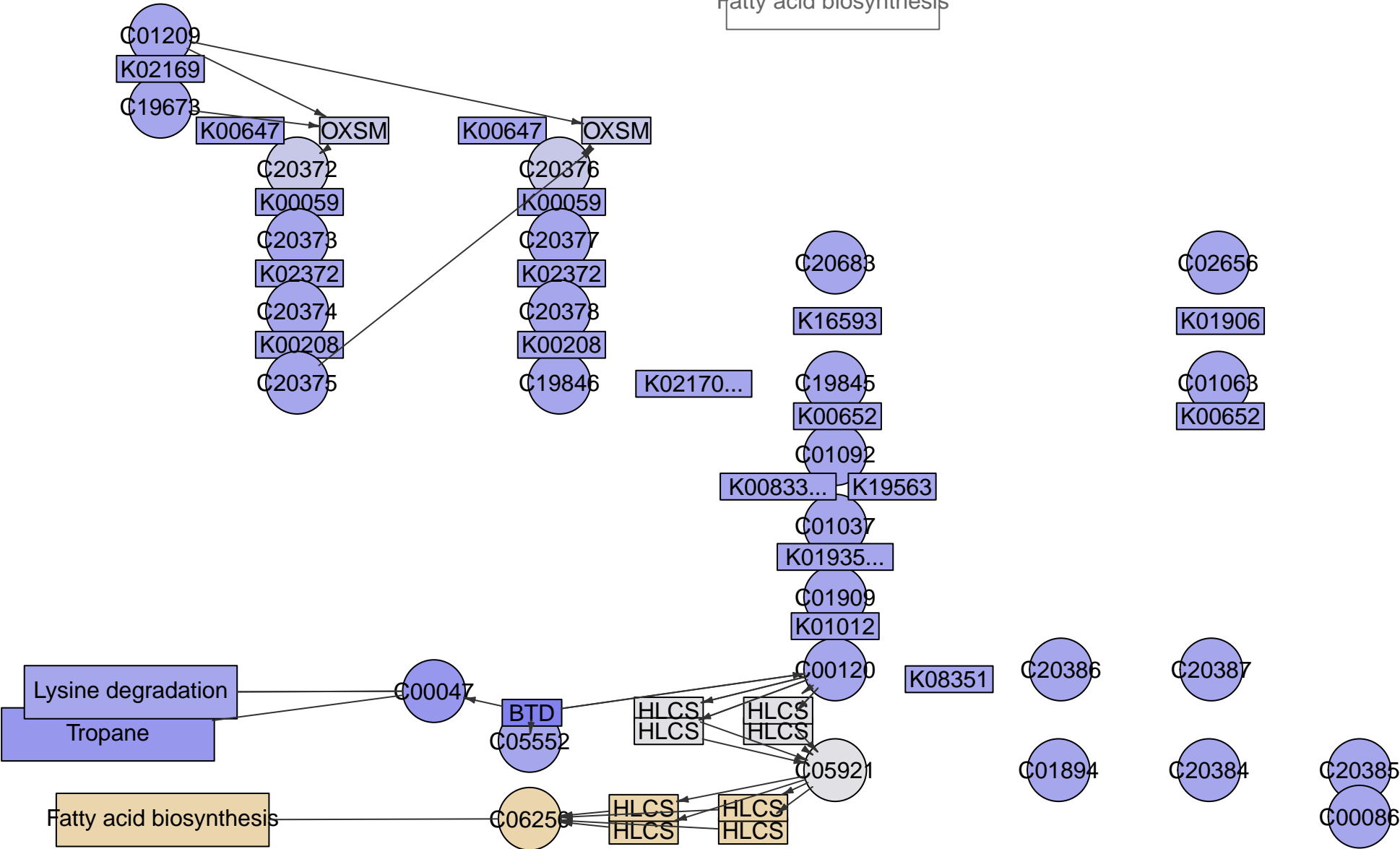
Biotin metabolism  
MPI-002

Fatty acid biosynthesis



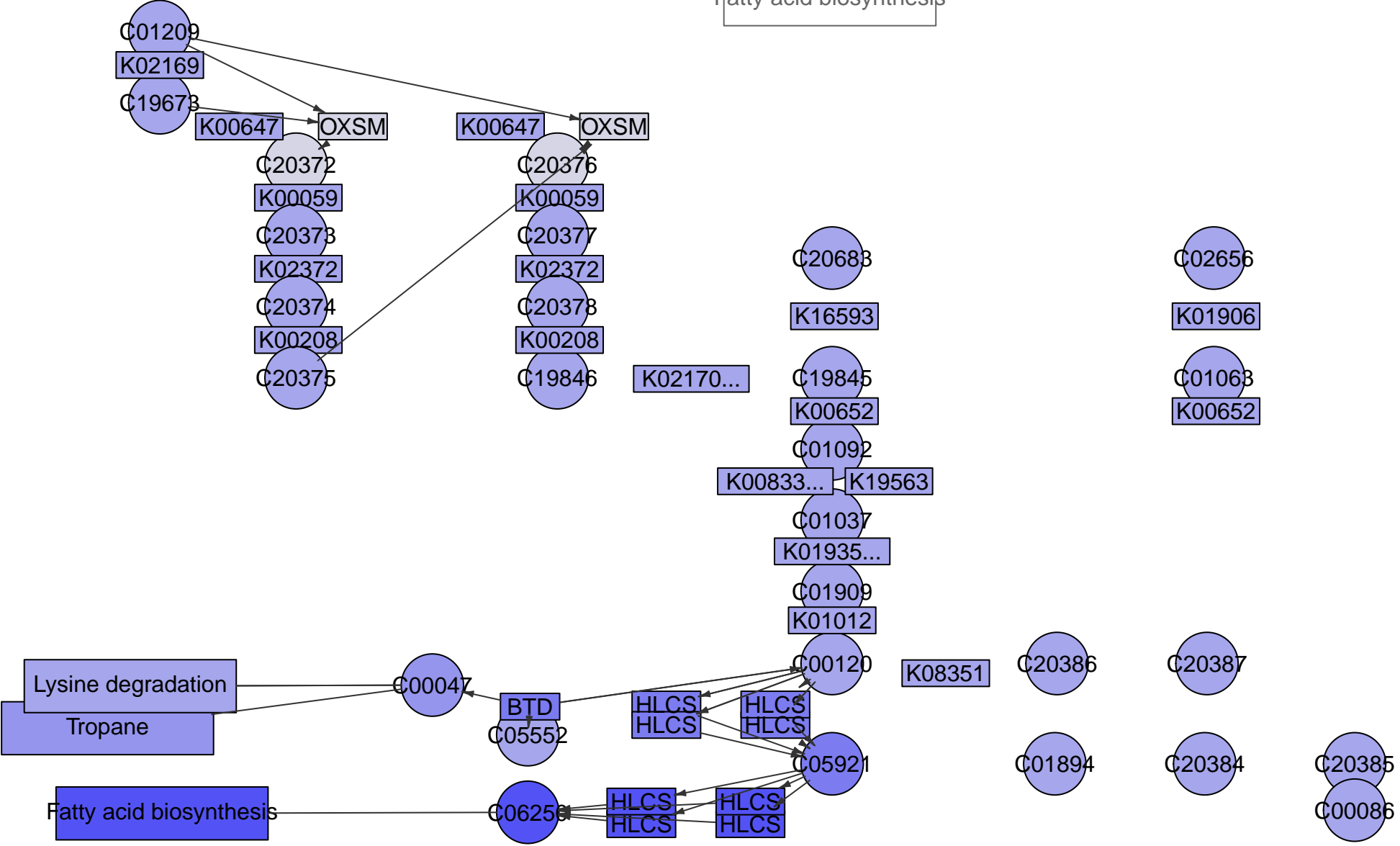
Biotin metabolism  
MPI-003

Fatty acid biosynthesis



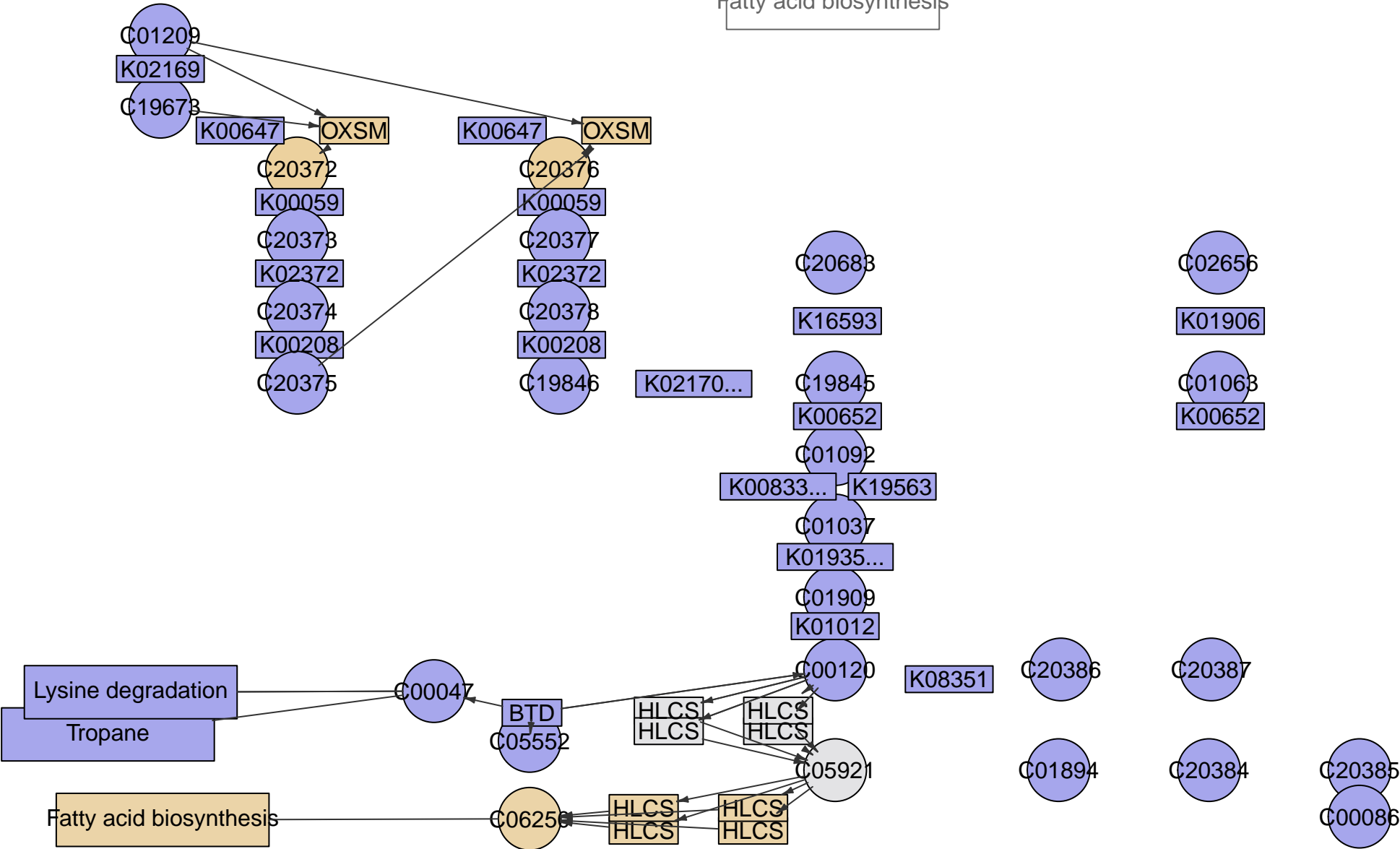
Biotin metabolism  
MPI-005

Fatty acid biosynthesis



Biotin metabolism  
MPI-006

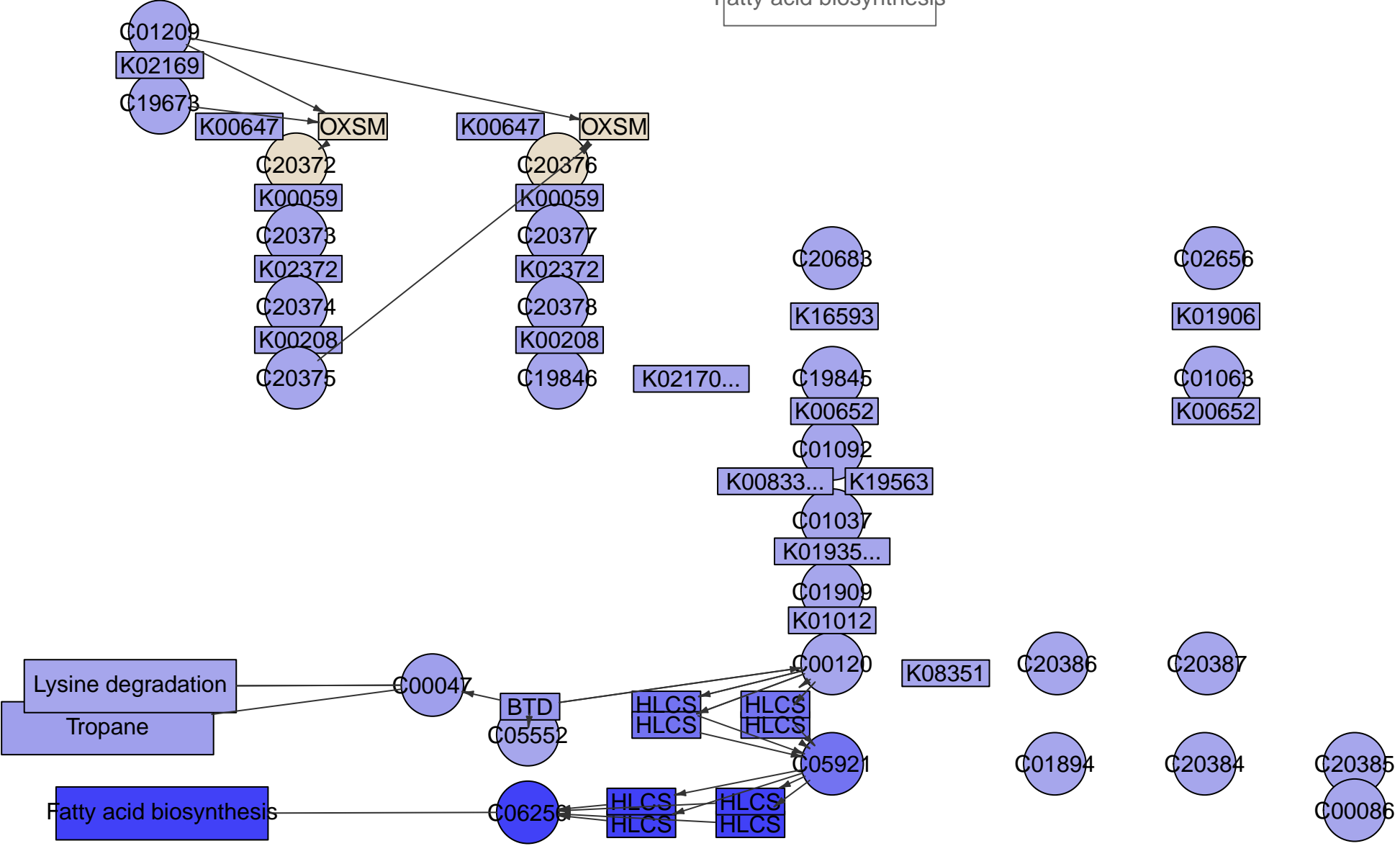
Fatty acid biosynthesis





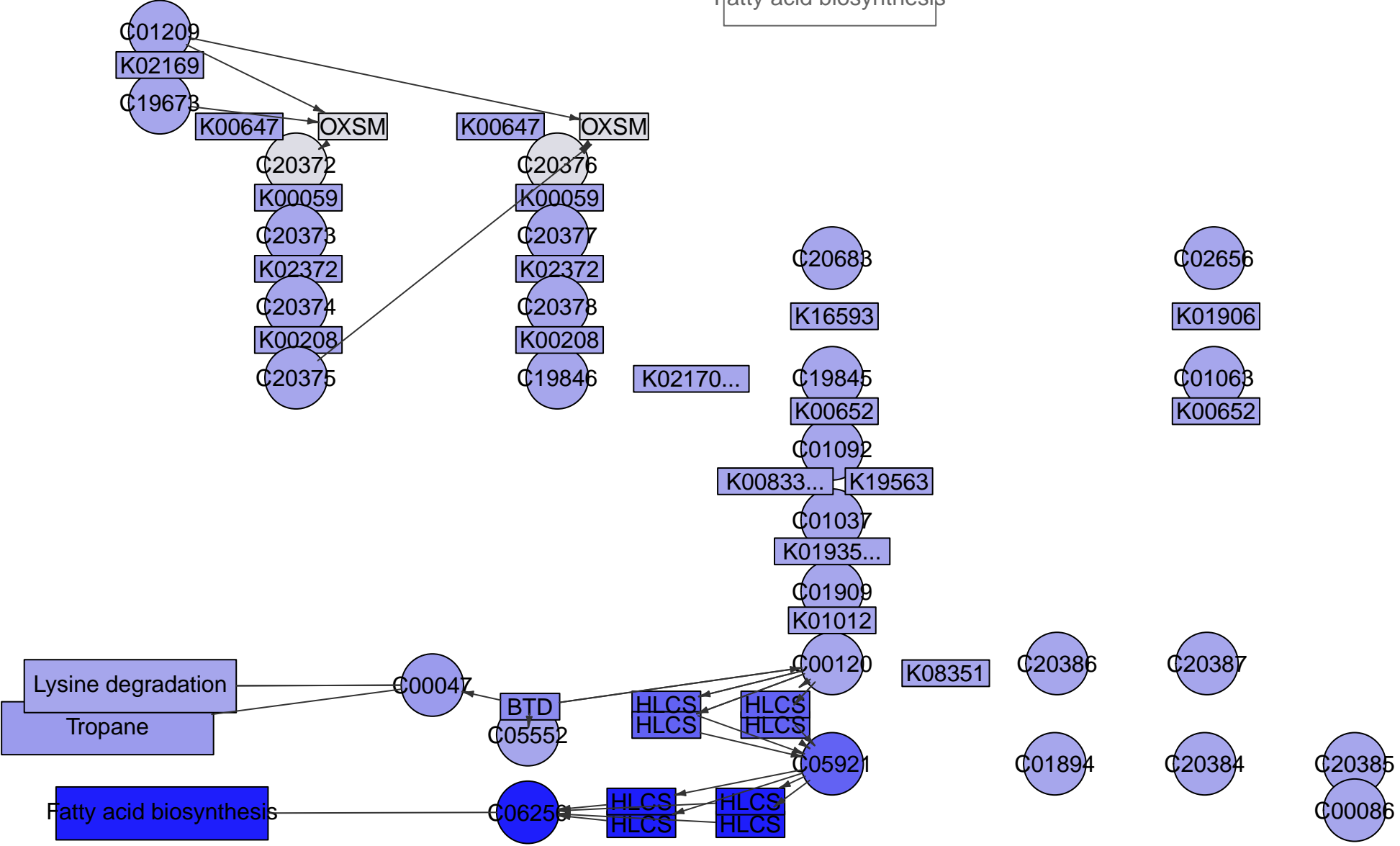
Biotin metabolism  
MPI-016

Fatty acid biosynthesis



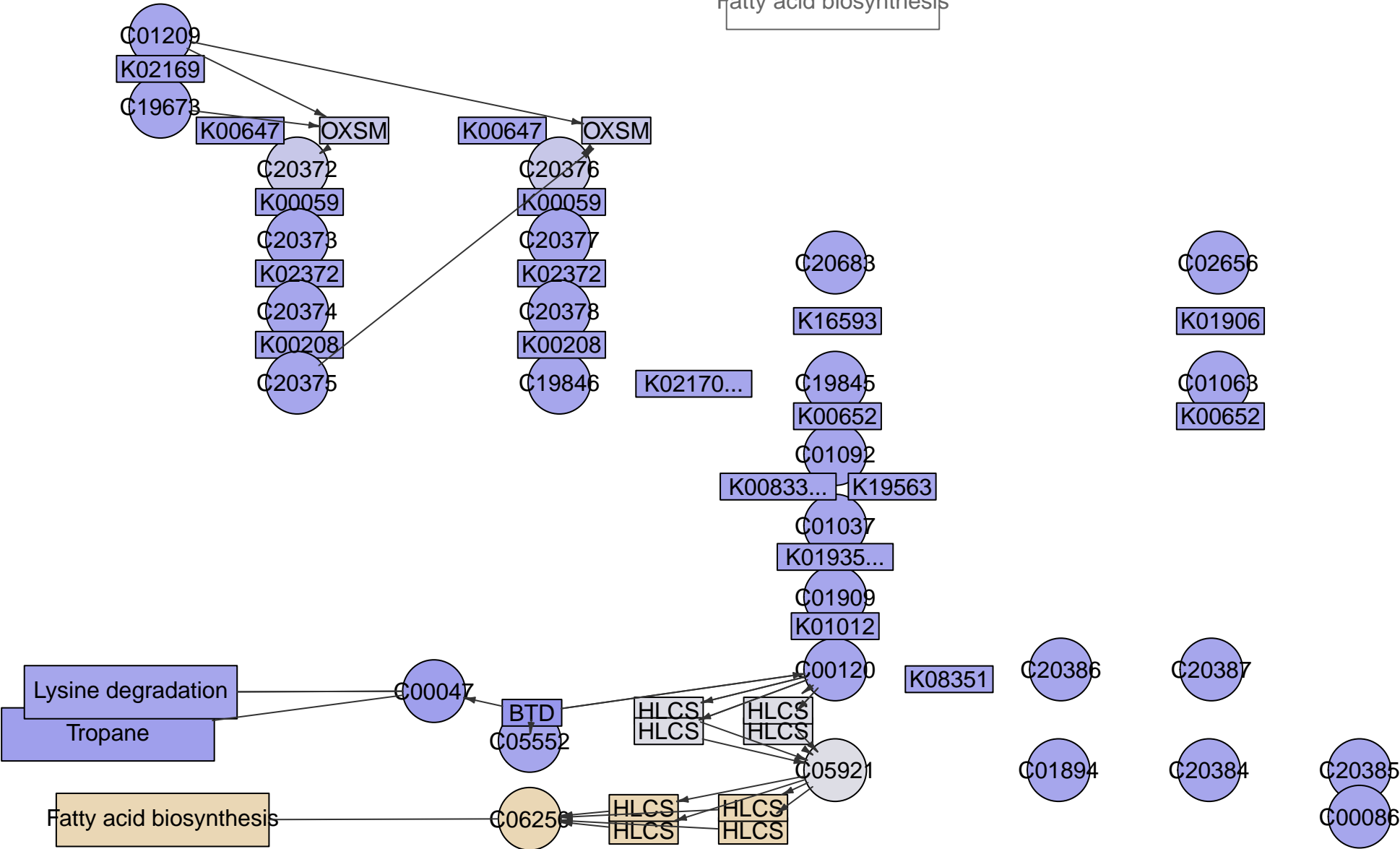
Biotin metabolism  
MPI-017

Fatty acid biosynthesis



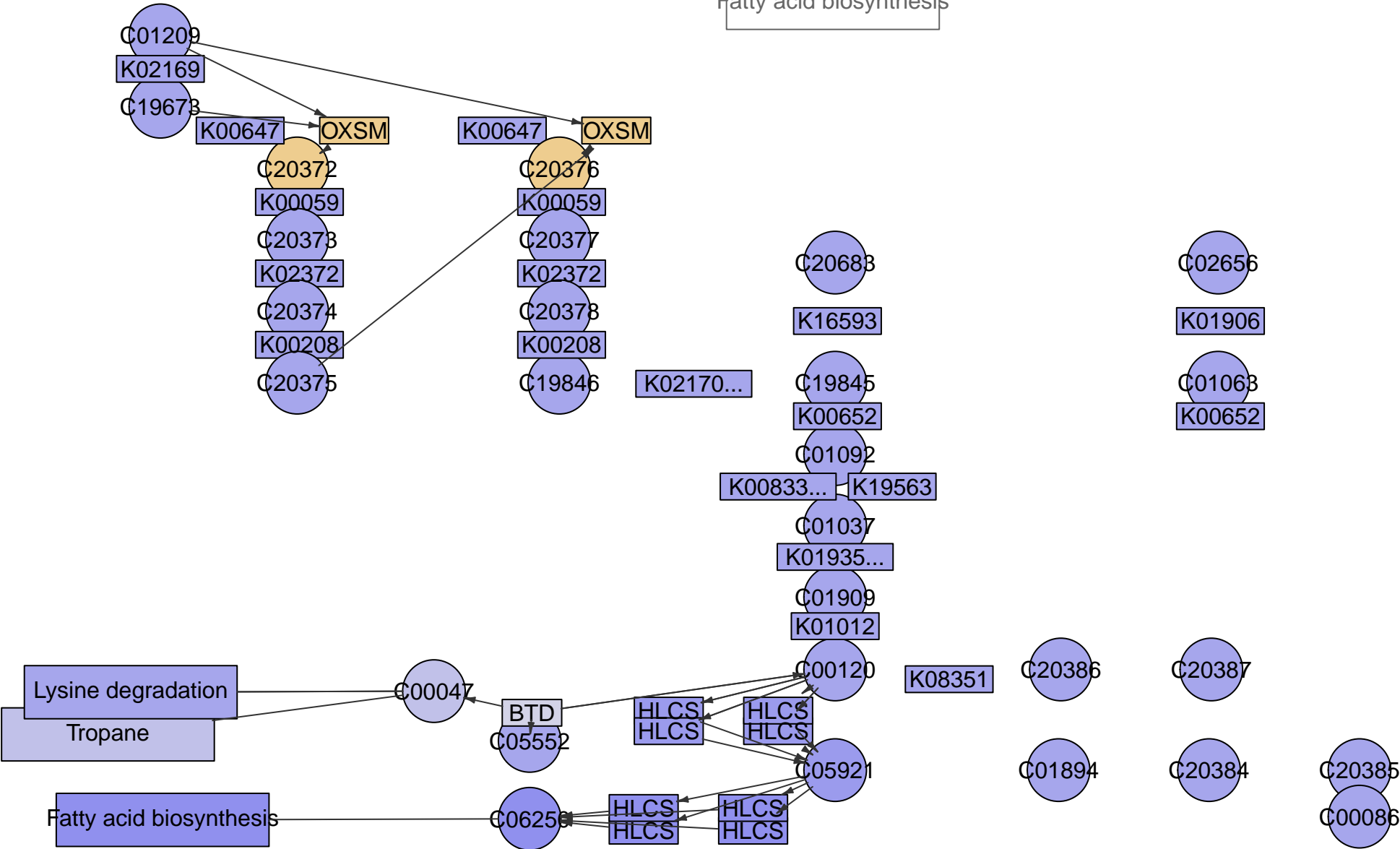
Biotin metabolism  
MPI-018

Fatty acid biosynthesis



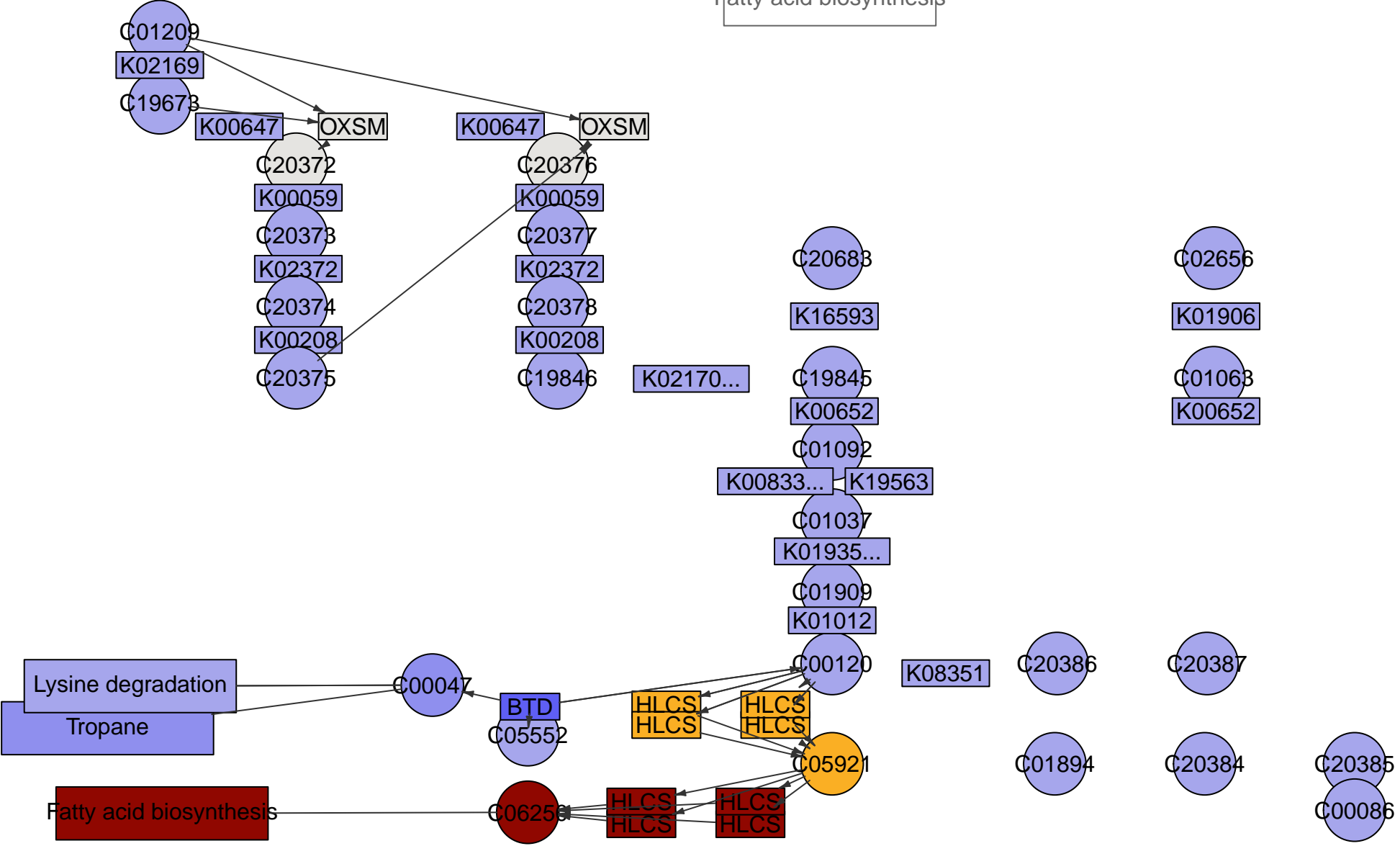
Biotin metabolism  
MPI-027

Fatty acid biosynthesis



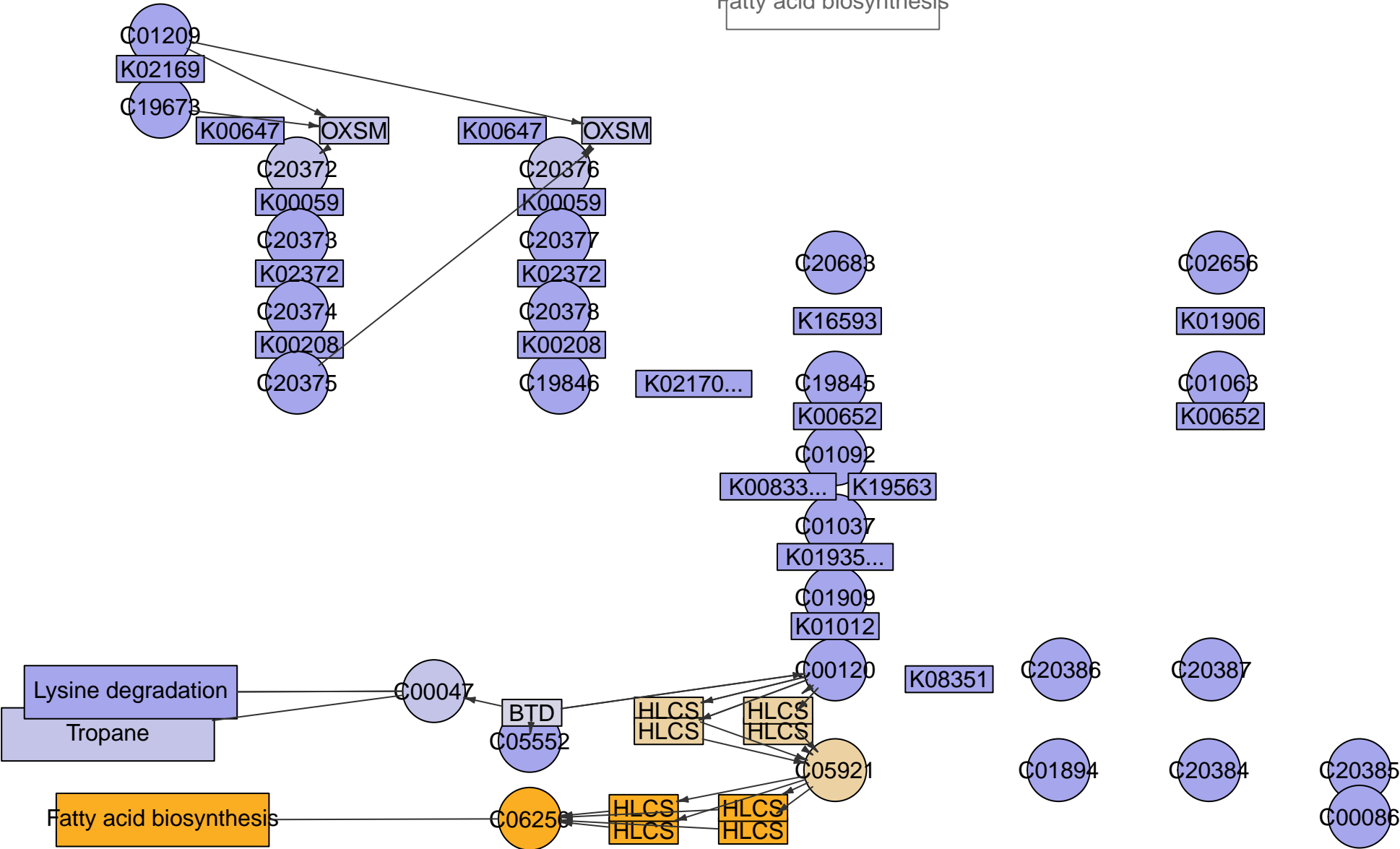
Biotin metabolism  
MPI-028

Fatty acid biosynthesis



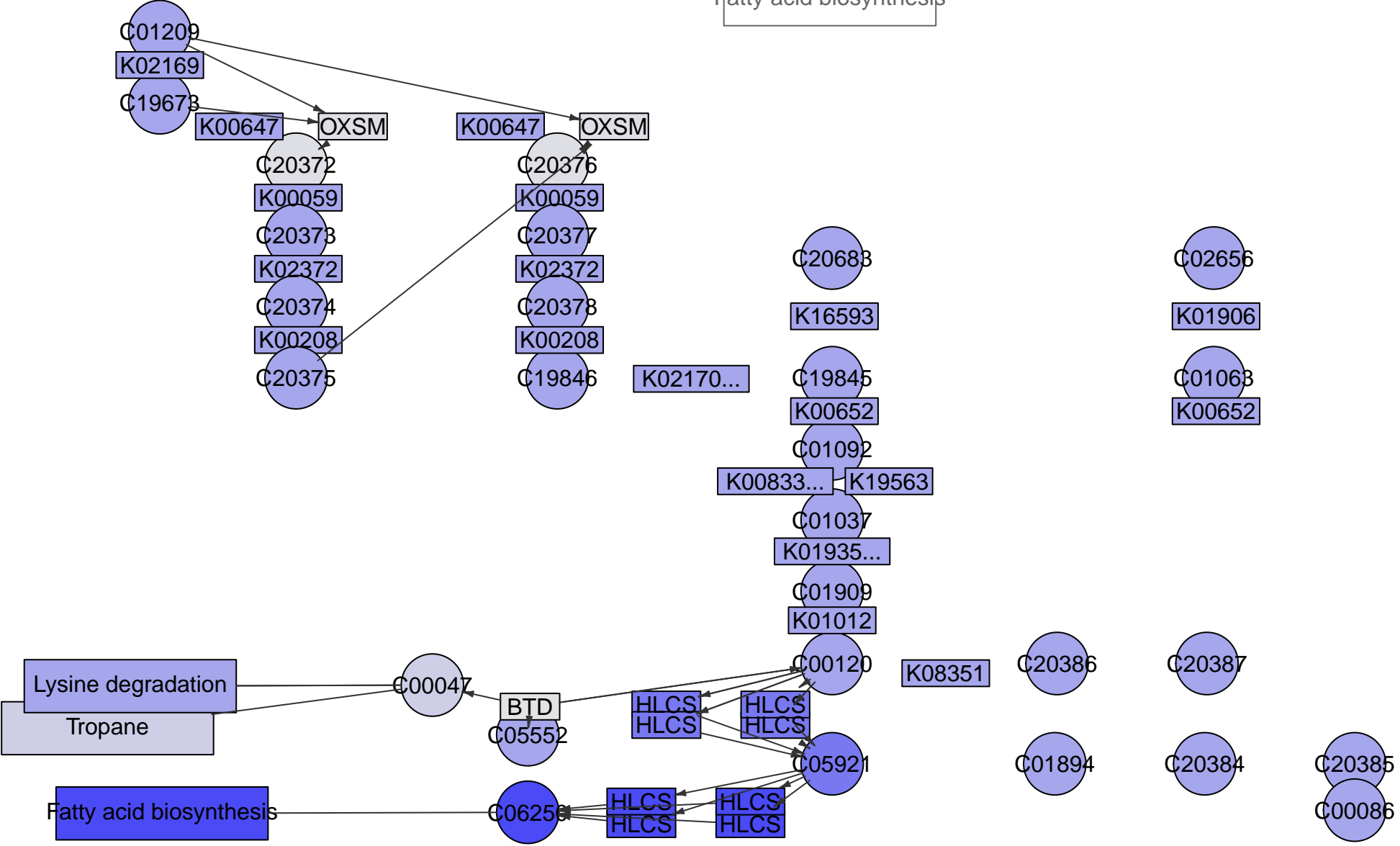
Biotin metabolism  
MPI-032

Fatty acid biosynthesis



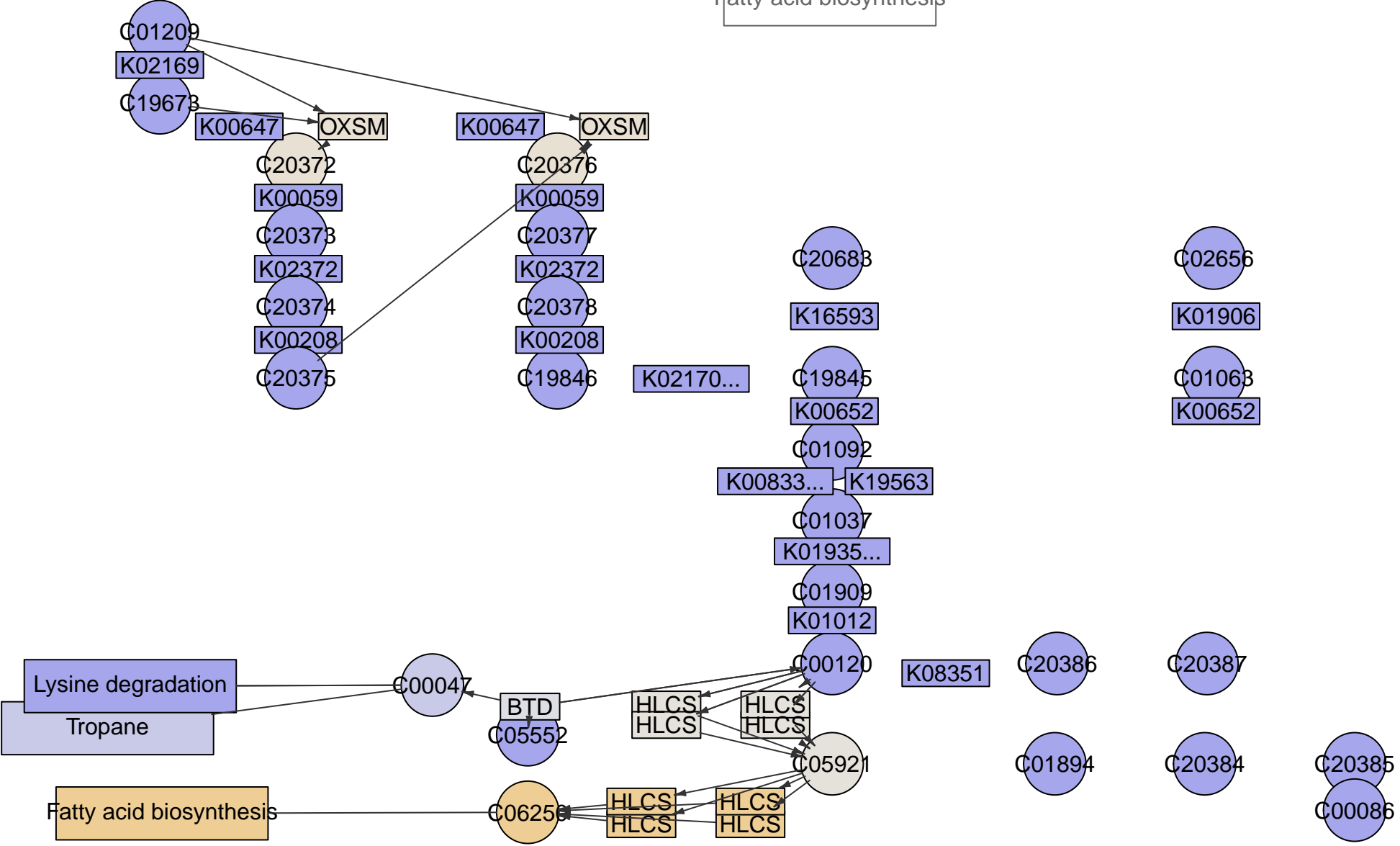
Biotin metabolism  
MPI-033

Fatty acid biosynthesis



Biotin metabolism  
MPI-034

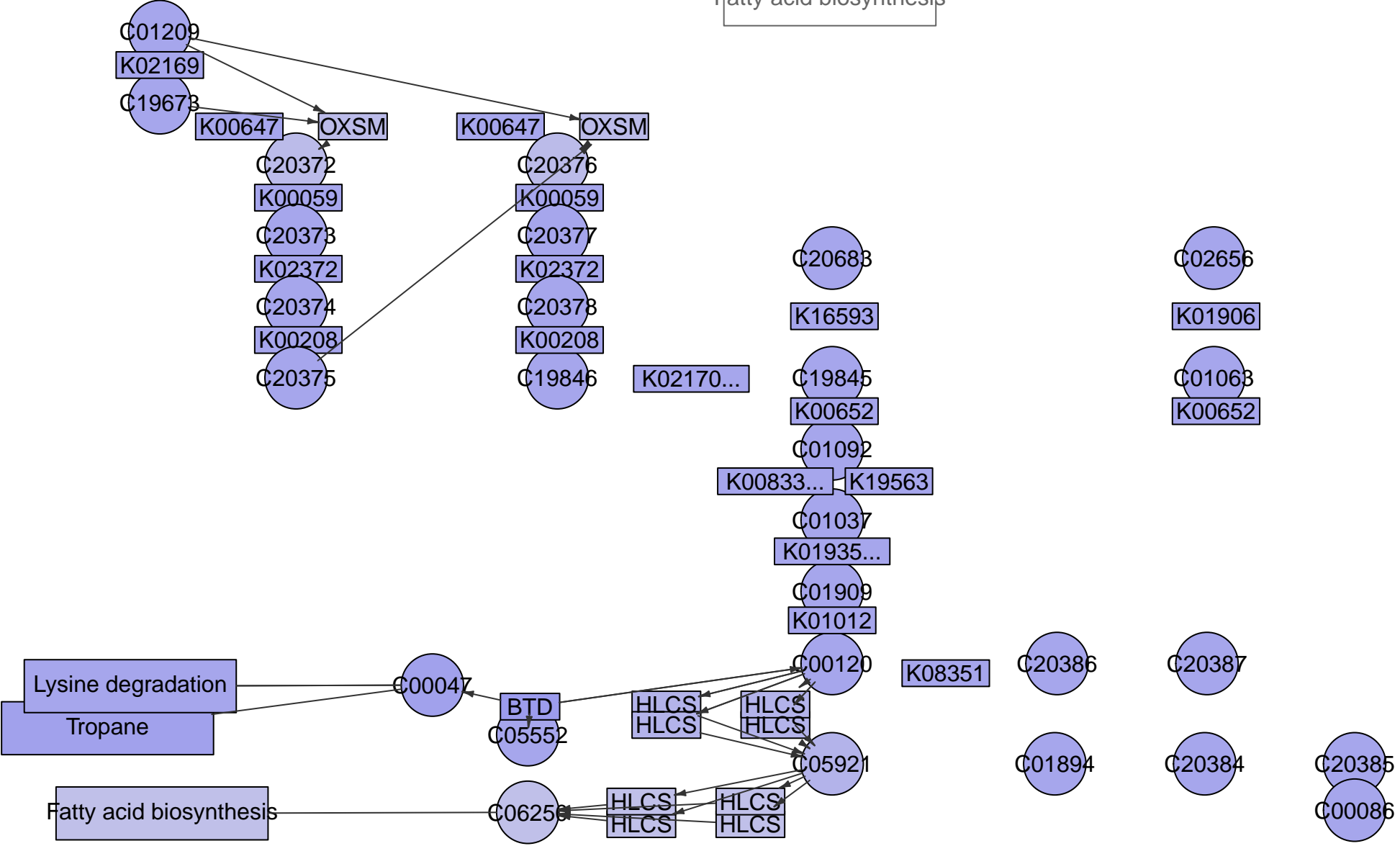
Fatty acid biosynthesis





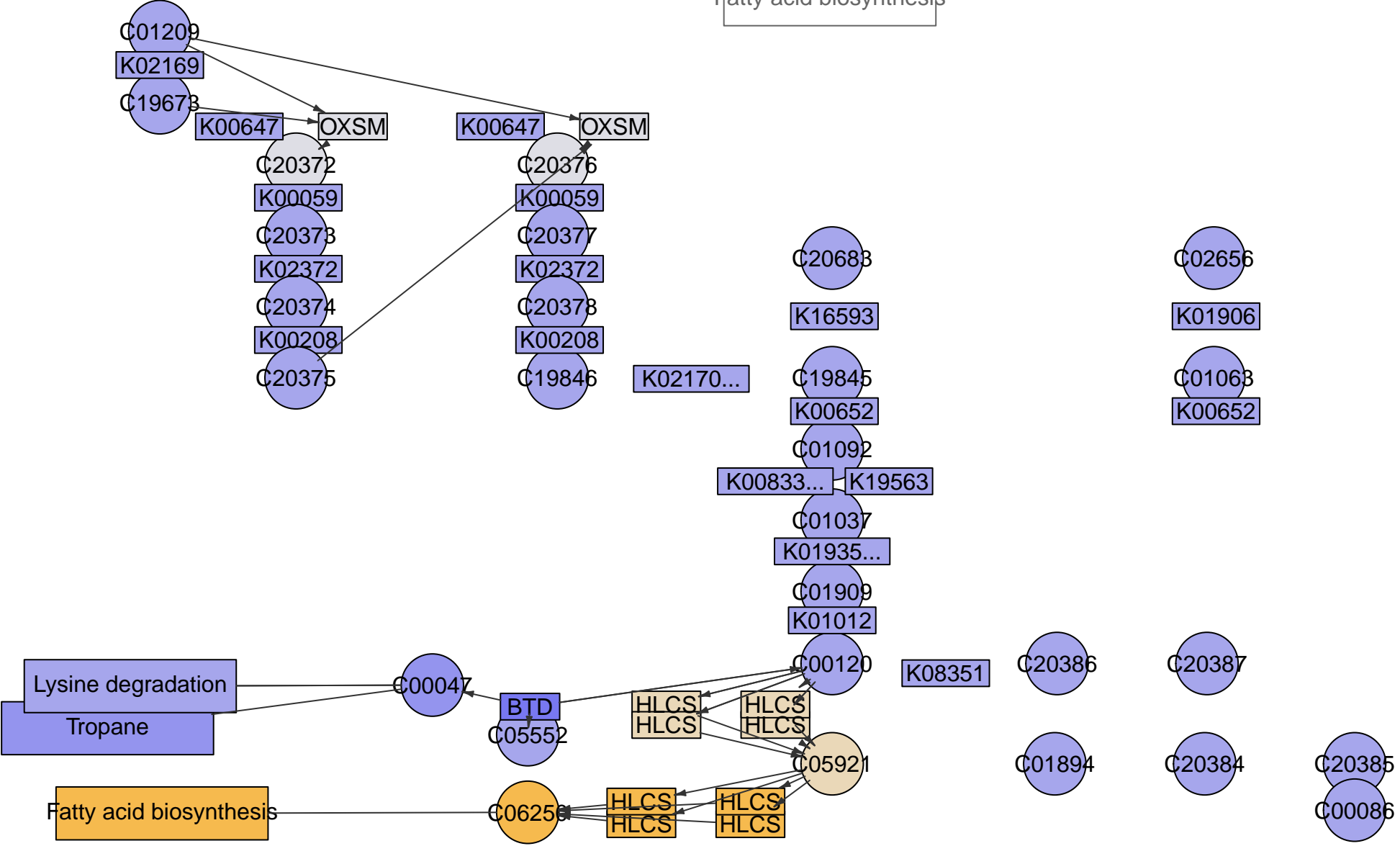
Biotin metabolism  
MPI-043

Fatty acid biosynthesis



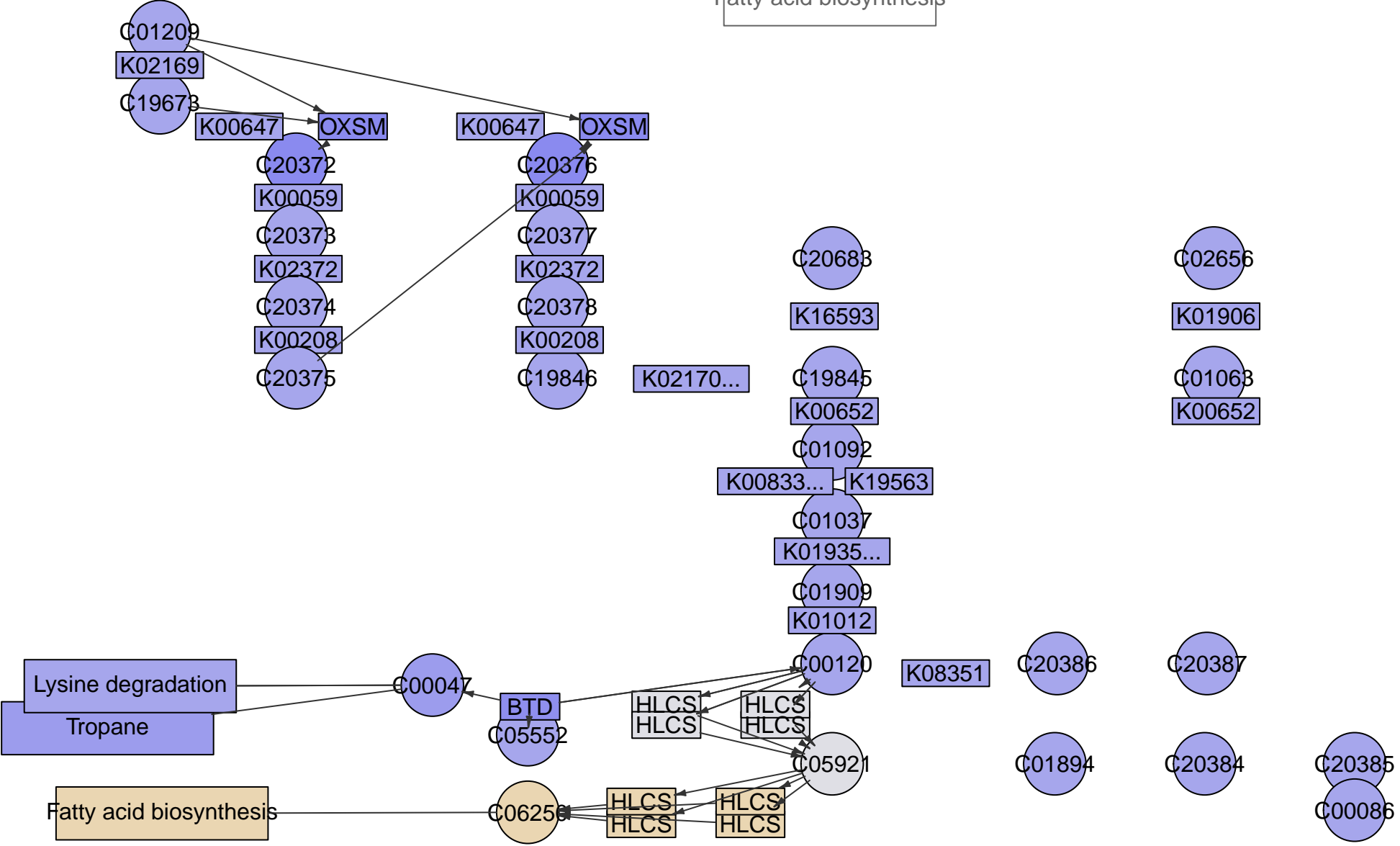
Biotin metabolism  
MPI-044

Fatty acid biosynthesis



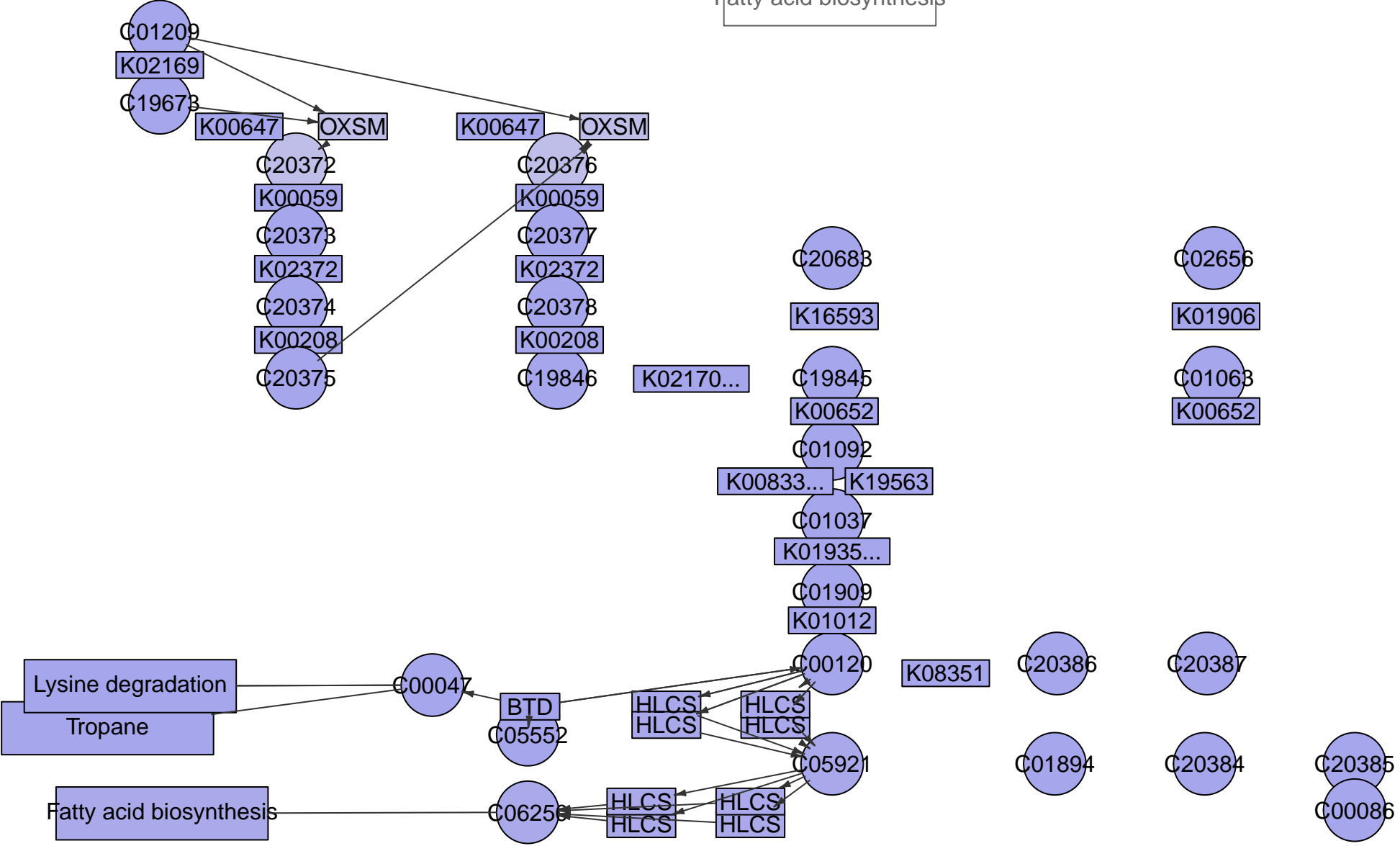
Biotin metabolism  
MPI-048

Fatty acid biosynthesis



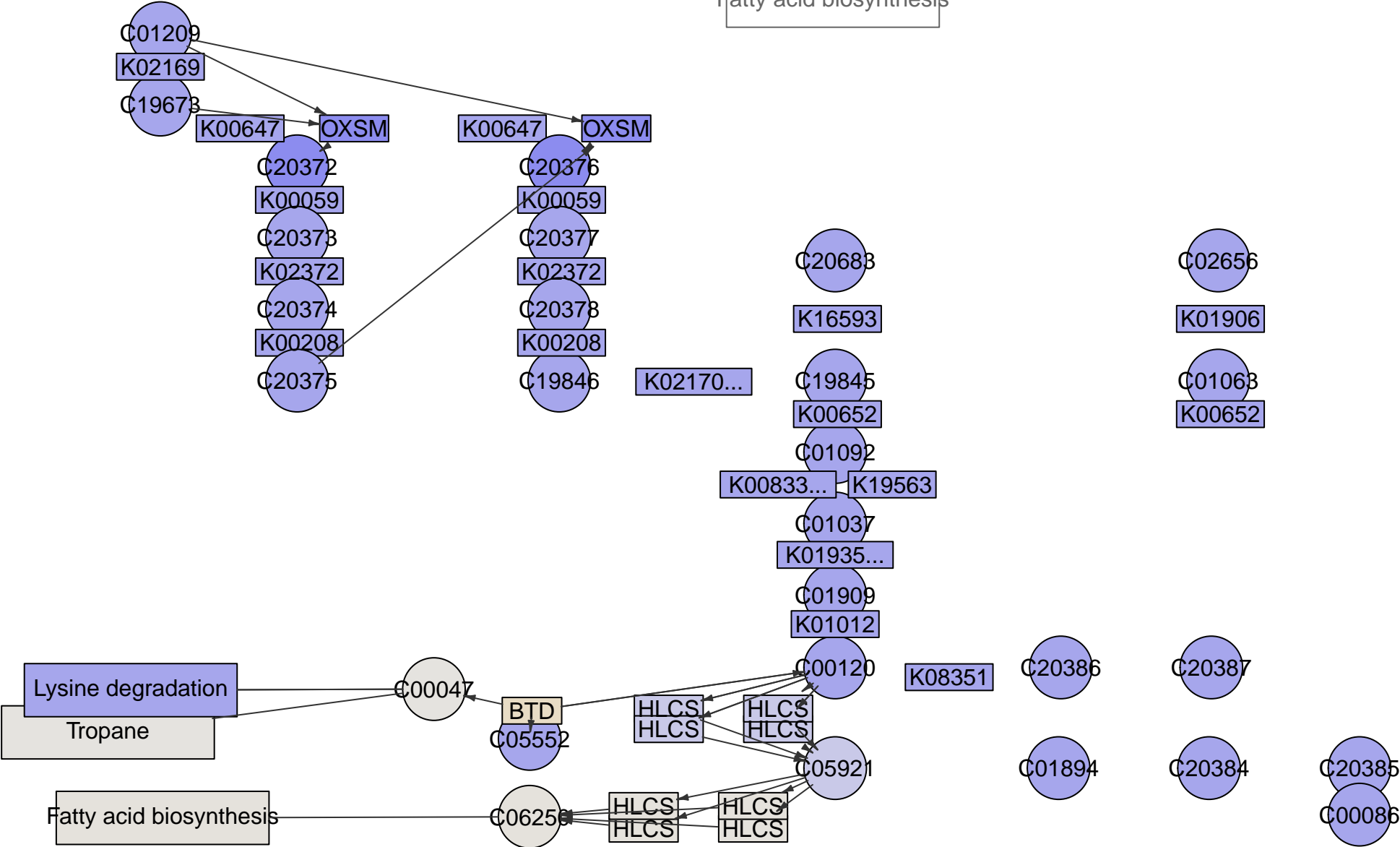
Biotin metabolism  
MPI-055

Fatty acid biosynthesis



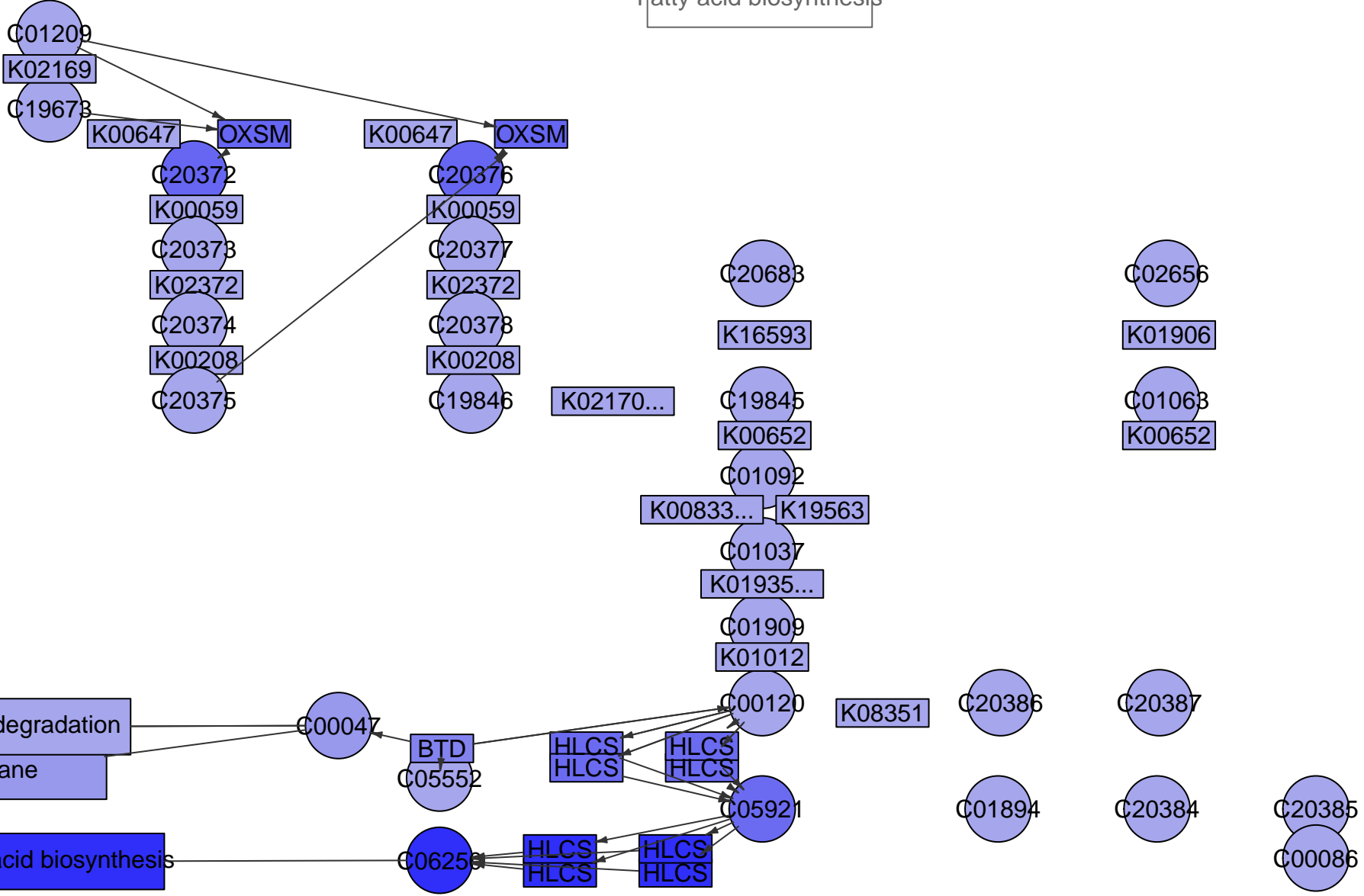
Biotin metabolism  
MPI-065

Fatty acid biosynthesis



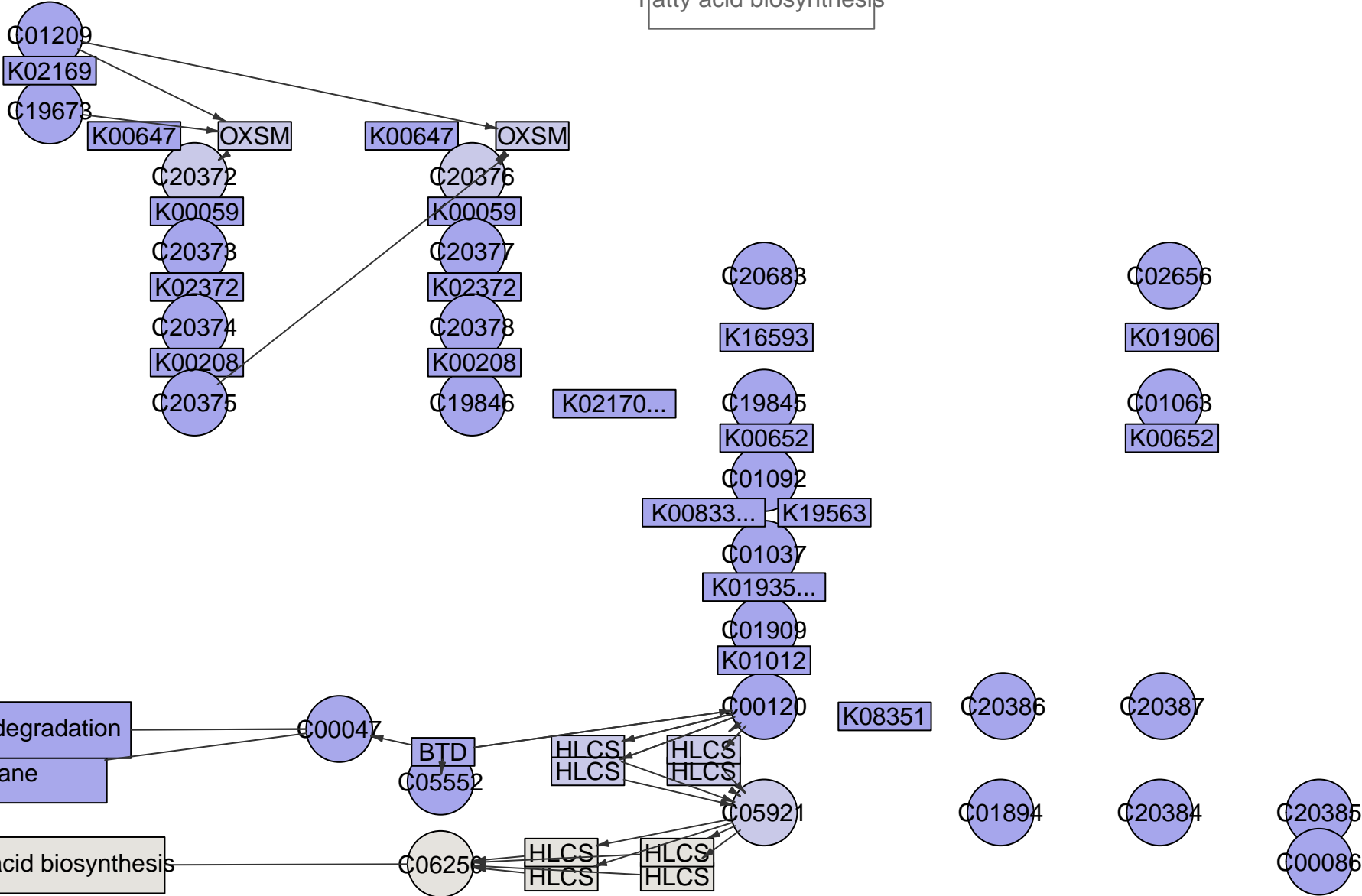
Biotin metabolism  
MPI-071

Fatty acid biosynthesis



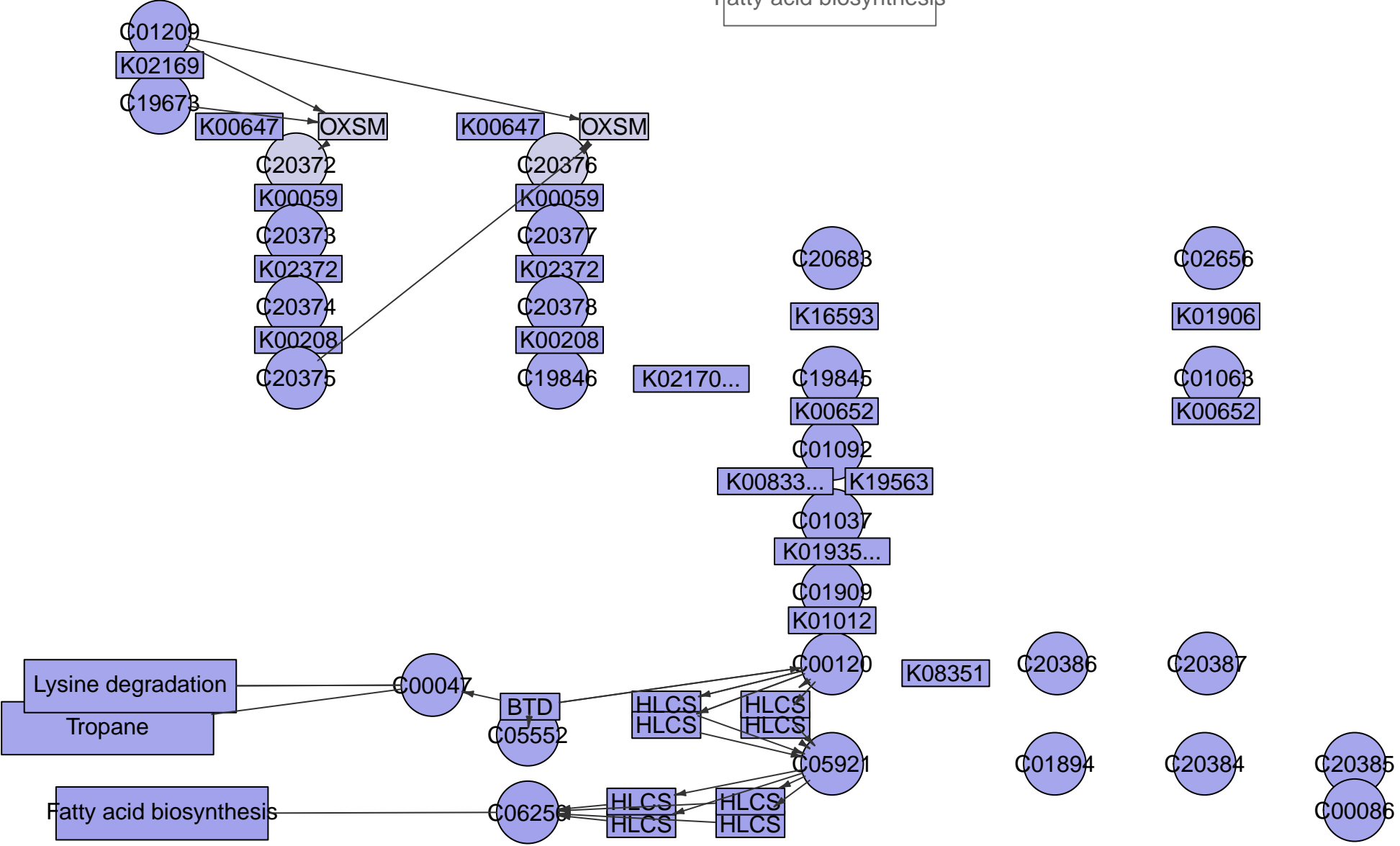
Biotin metabolism  
MPI-075

Fatty acid biosynthesis



Biotin metabolism  
MPI-077

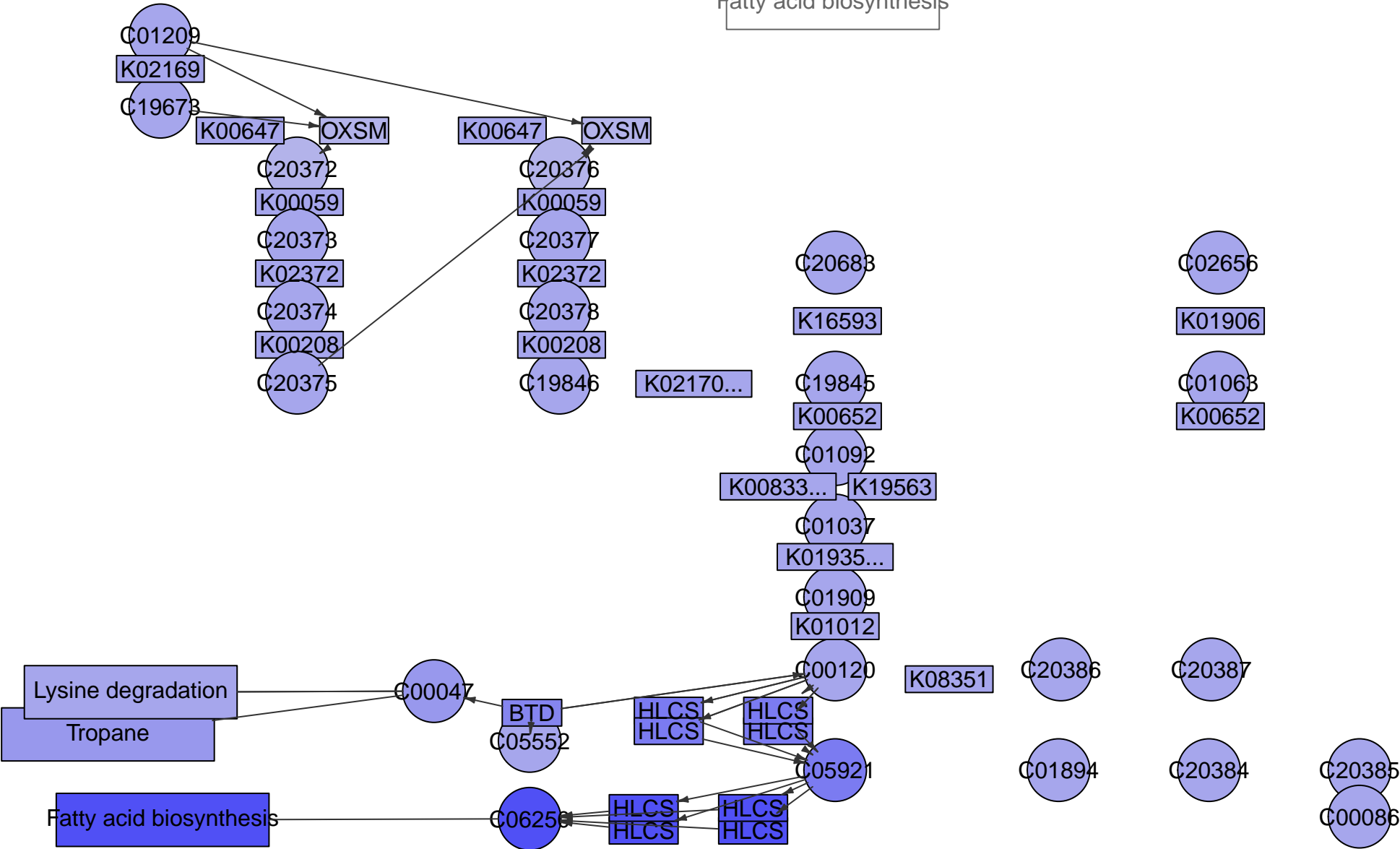
Fatty acid biosynthesis





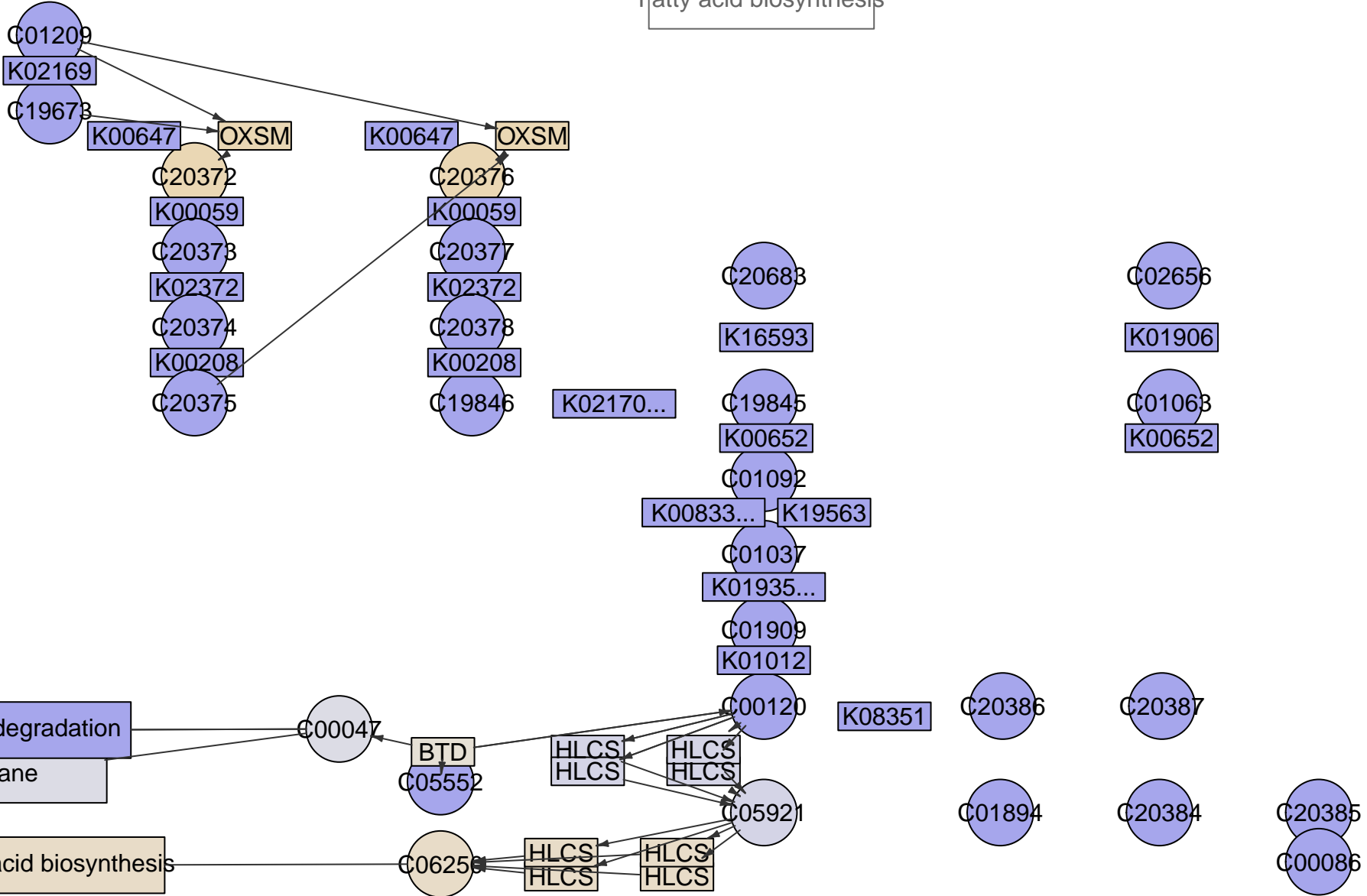
Biotin metabolism  
MPI-078

Fatty acid biosynthesis



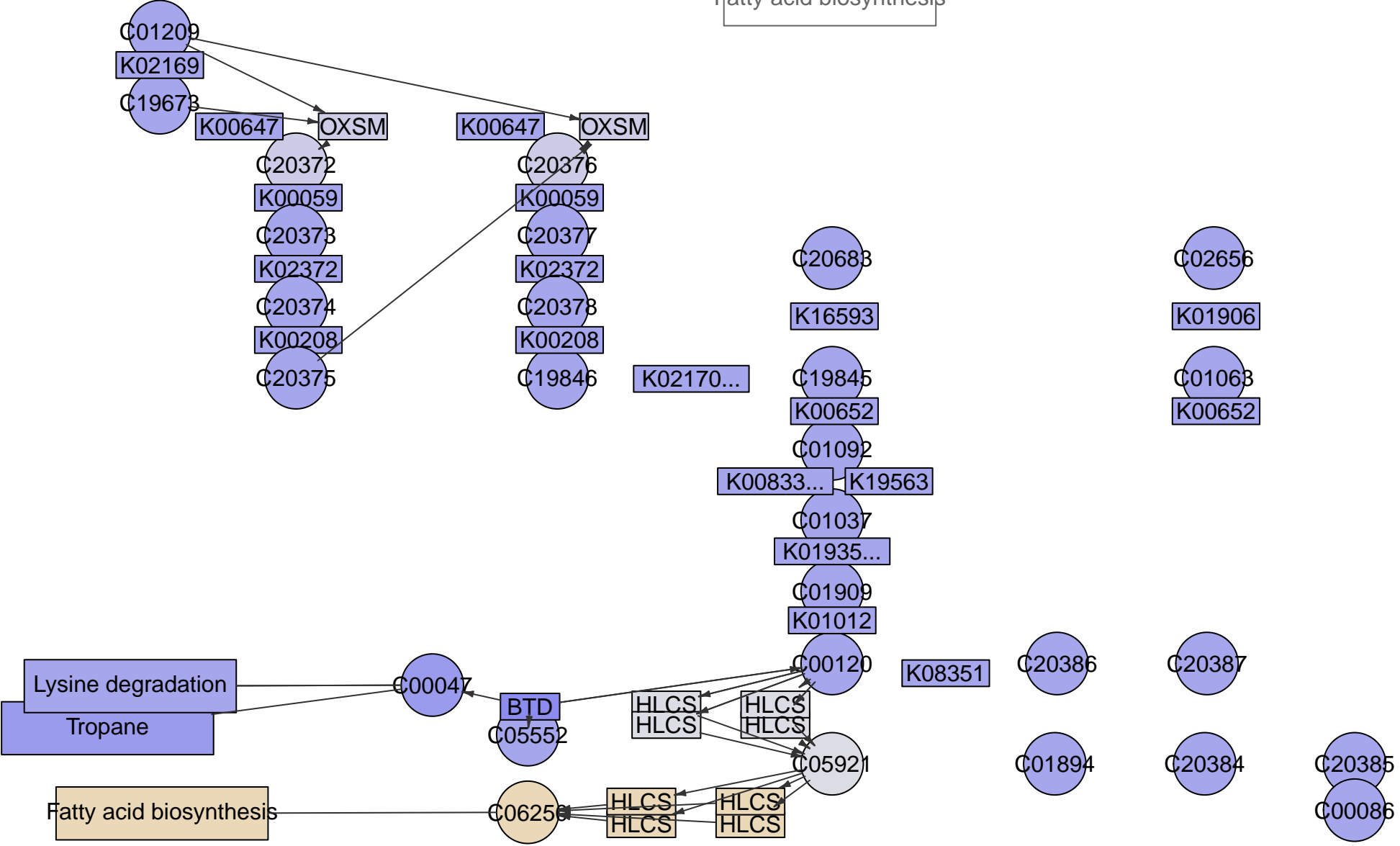
Biotin metabolism  
MPI-079

Fatty acid biosynthesis



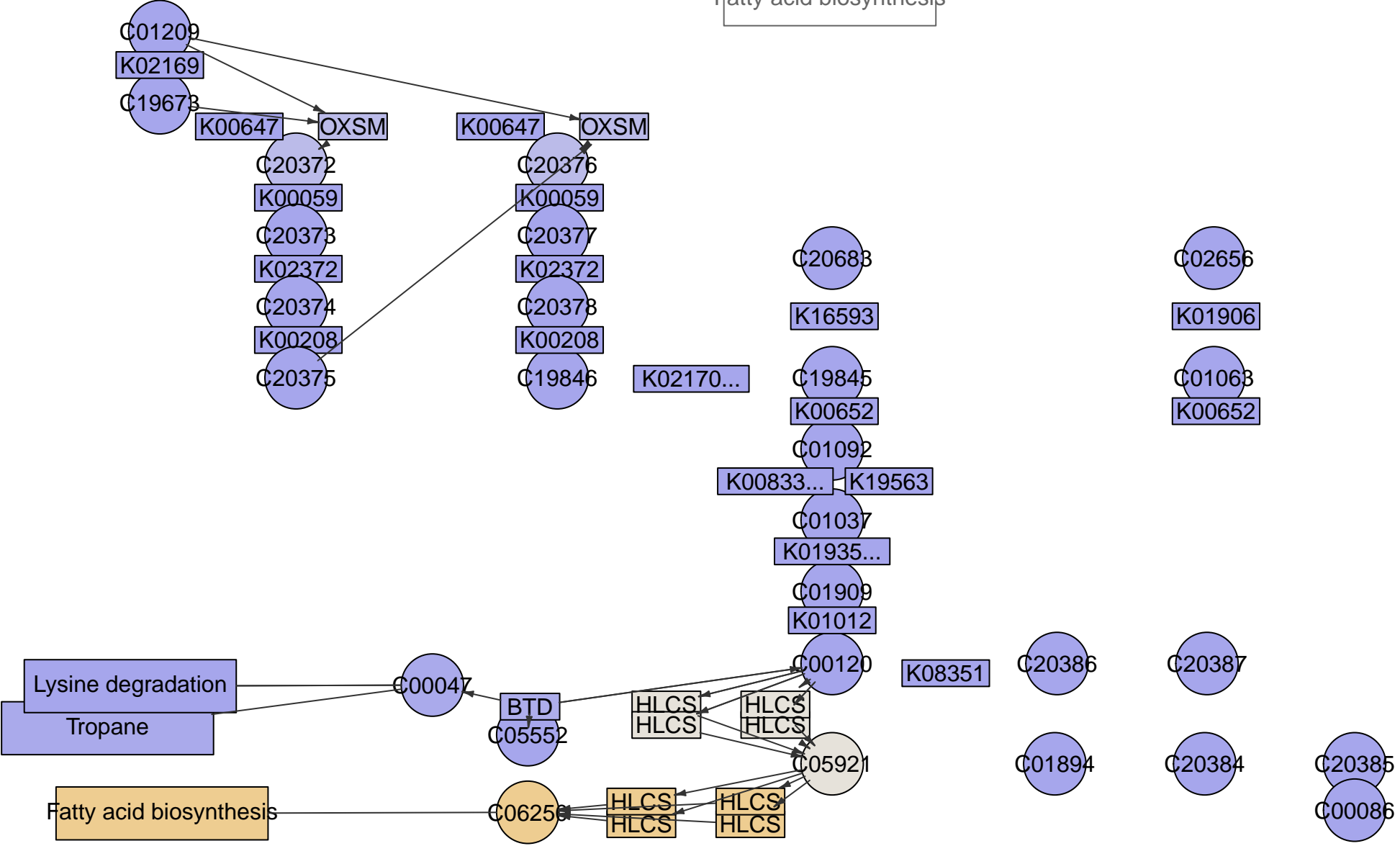
Biotin metabolism  
MPI-080

Fatty acid biosynthesis



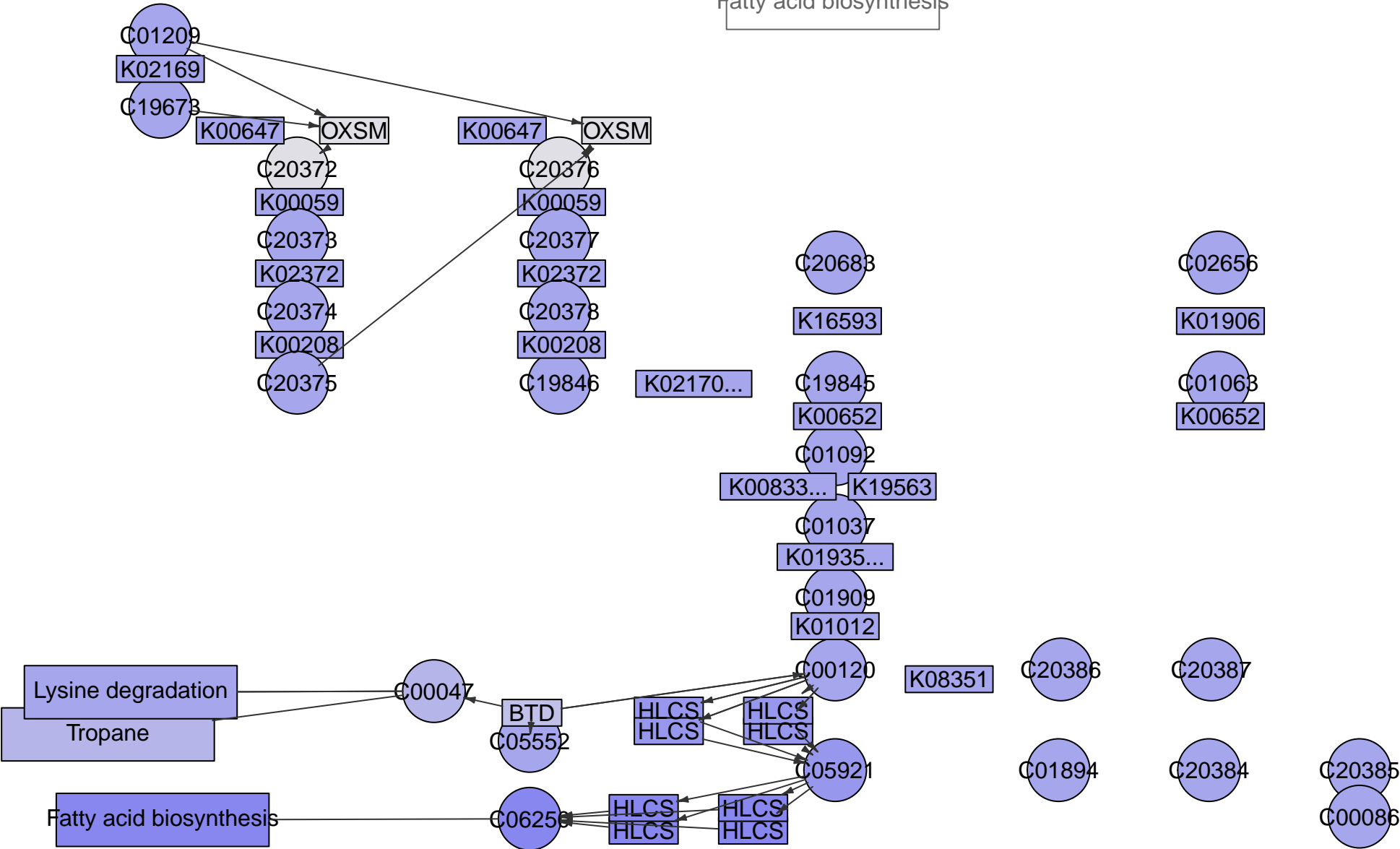
Biotin metabolism  
MPI-081

Fatty acid biosynthesis



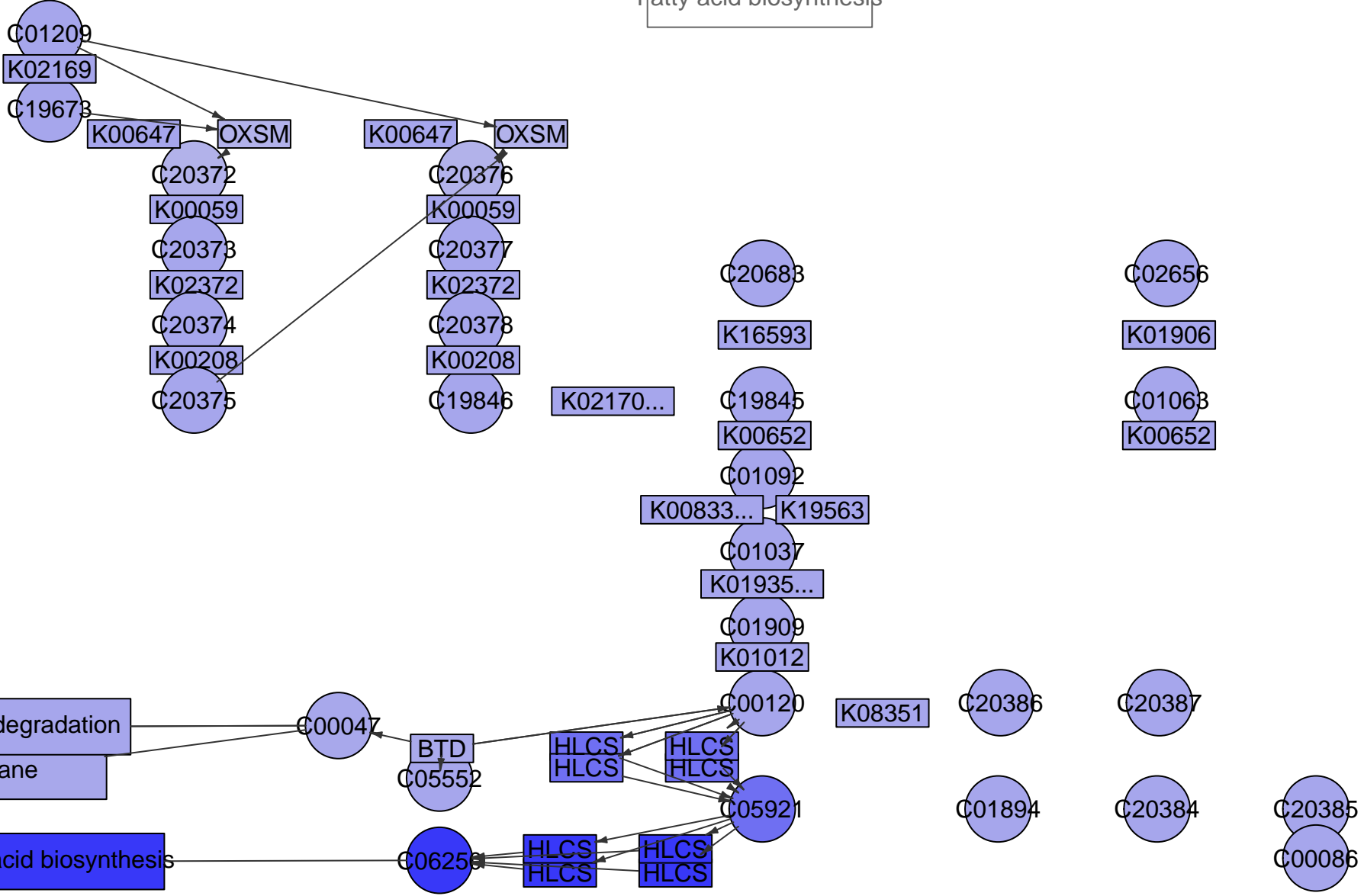
Biotin metabolism  
MPI-082

Fatty acid biosynthesis



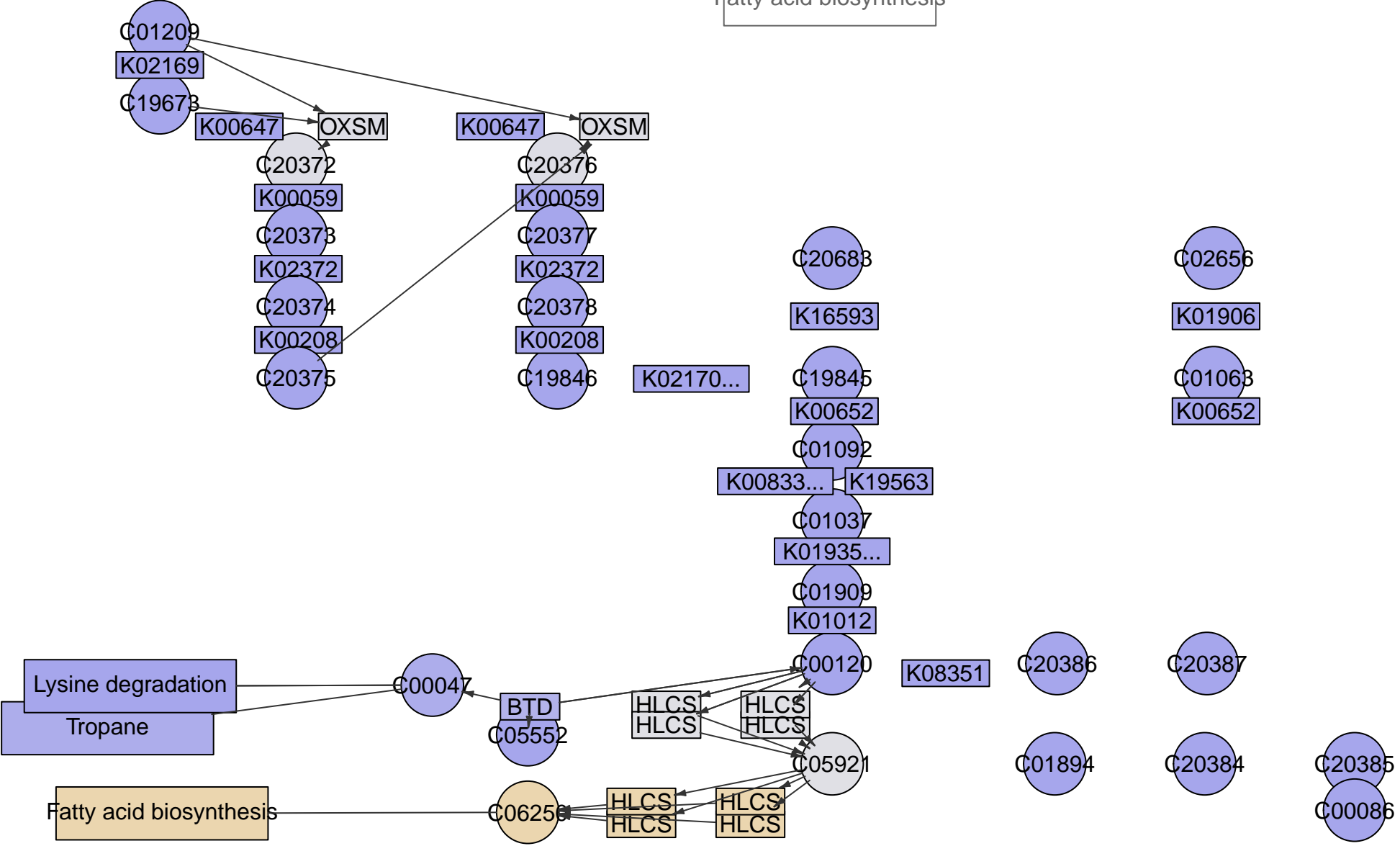
Biotin metabolism  
MPI-084

Fatty acid biosynthesis



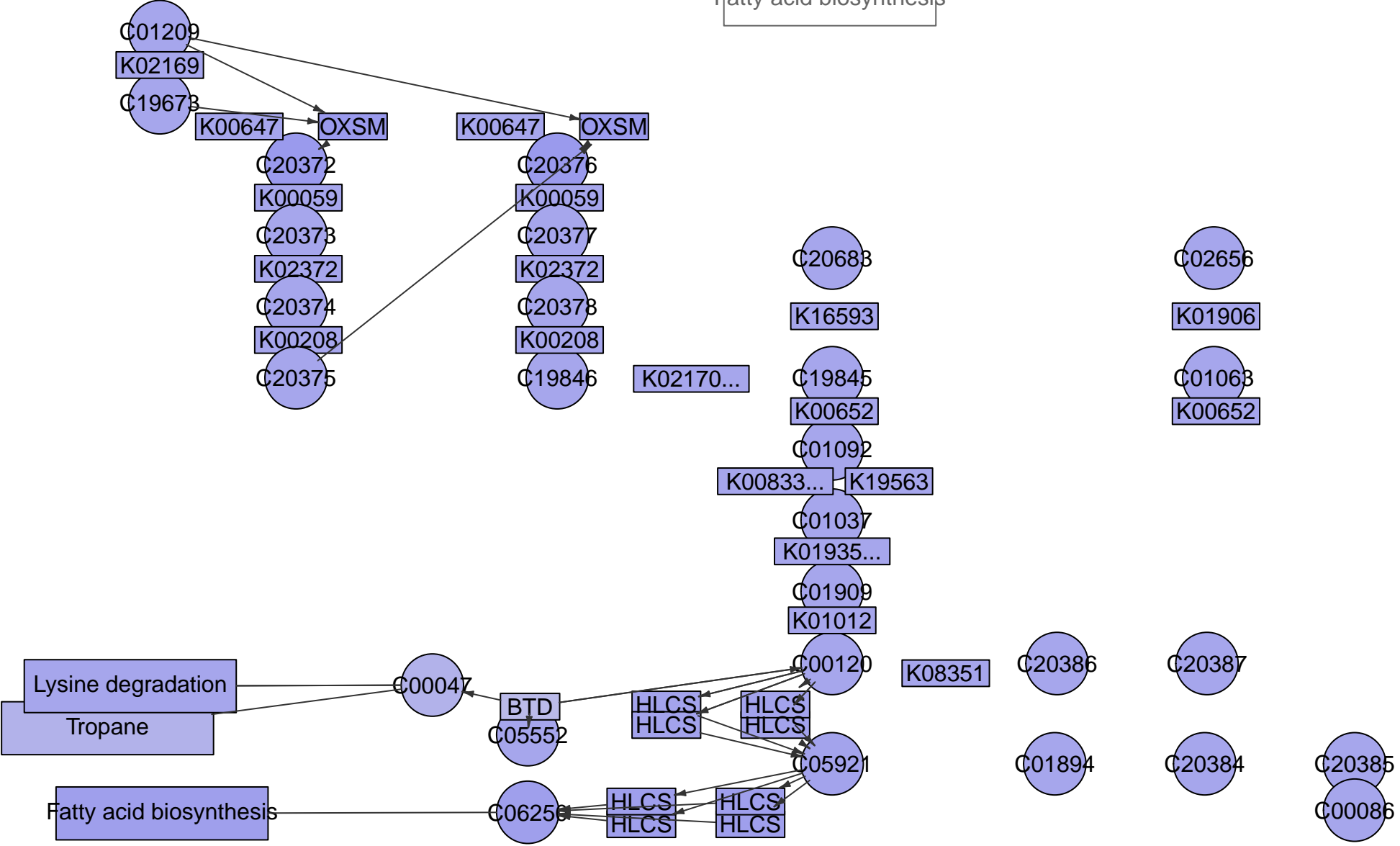
Biotin metabolism  
MPI-085

Fatty acid biosynthesis



Biotin metabolism  
MPI-086

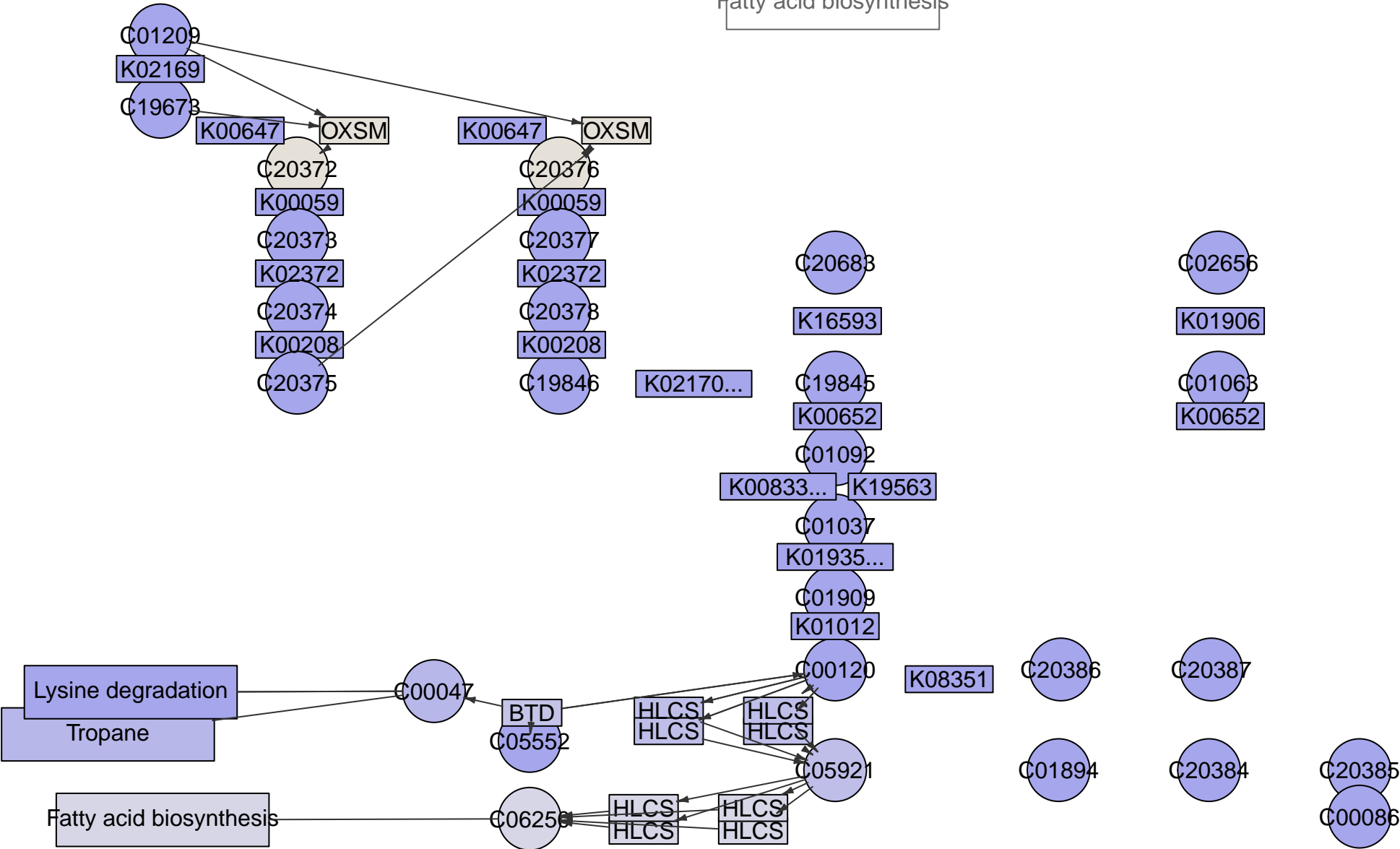
Fatty acid biosynthesis





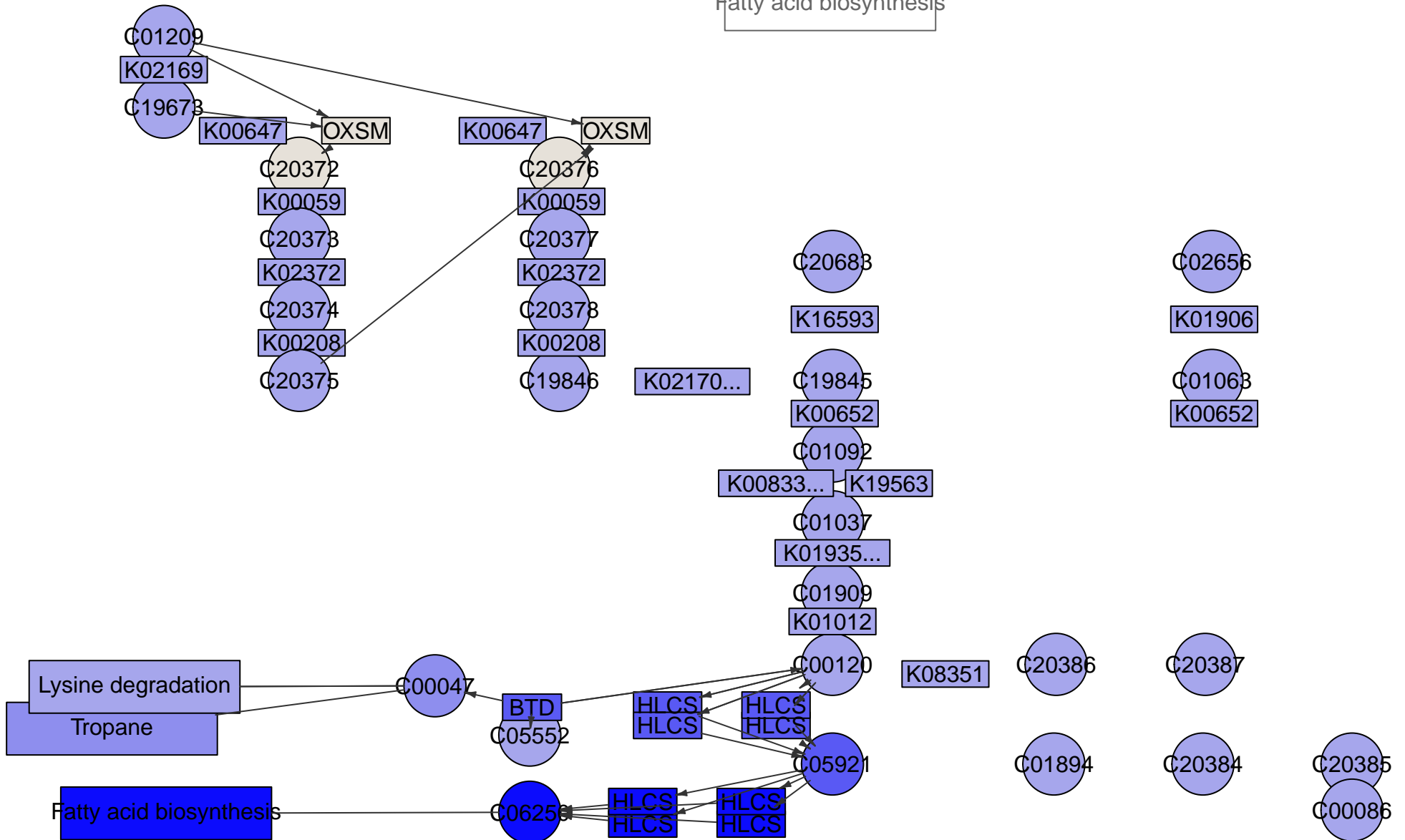
Biotin metabolism  
MPI-087

Fatty acid biosynthesis



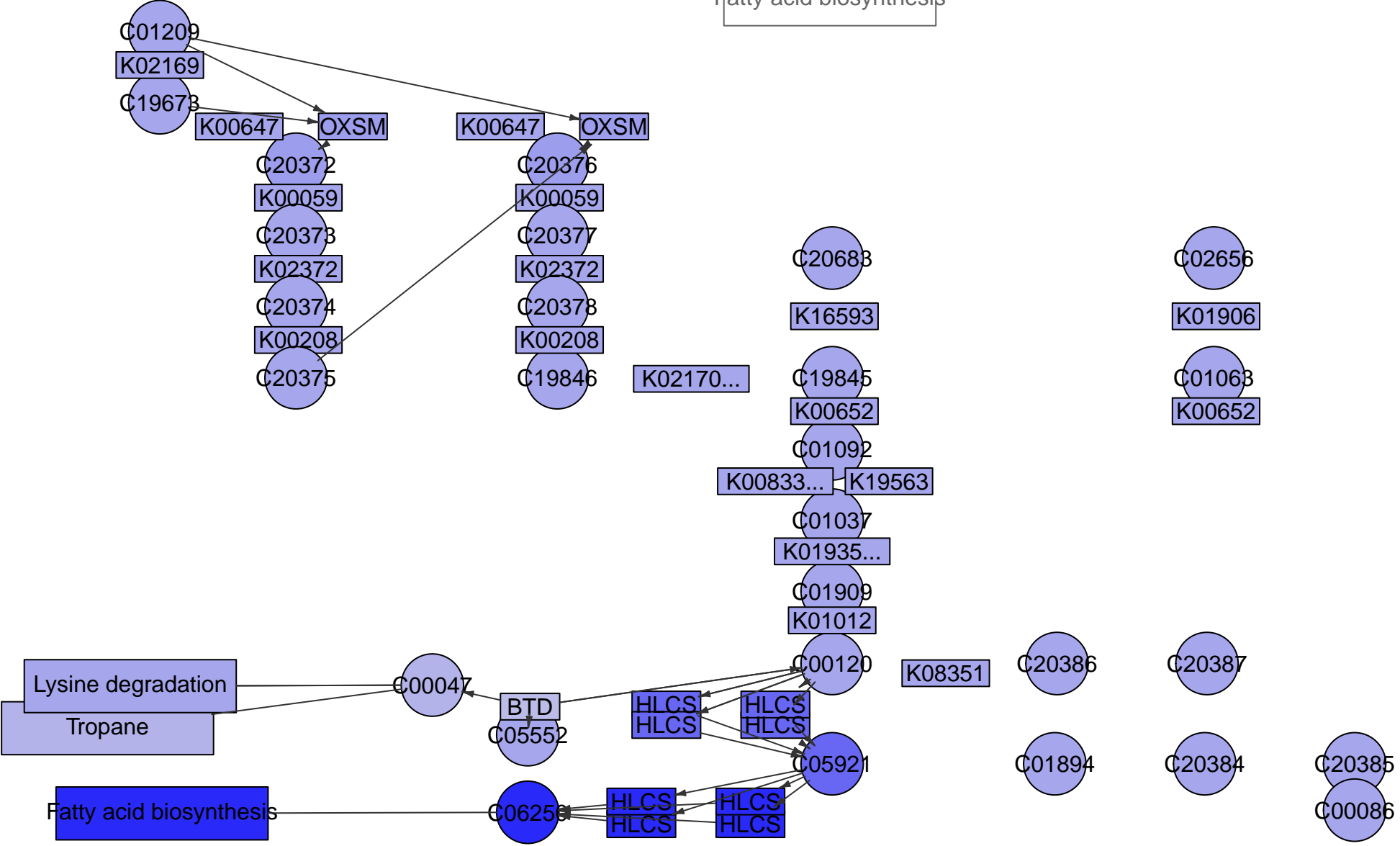
Biotin metabolism  
MPI-089

Fatty acid biosynthesis



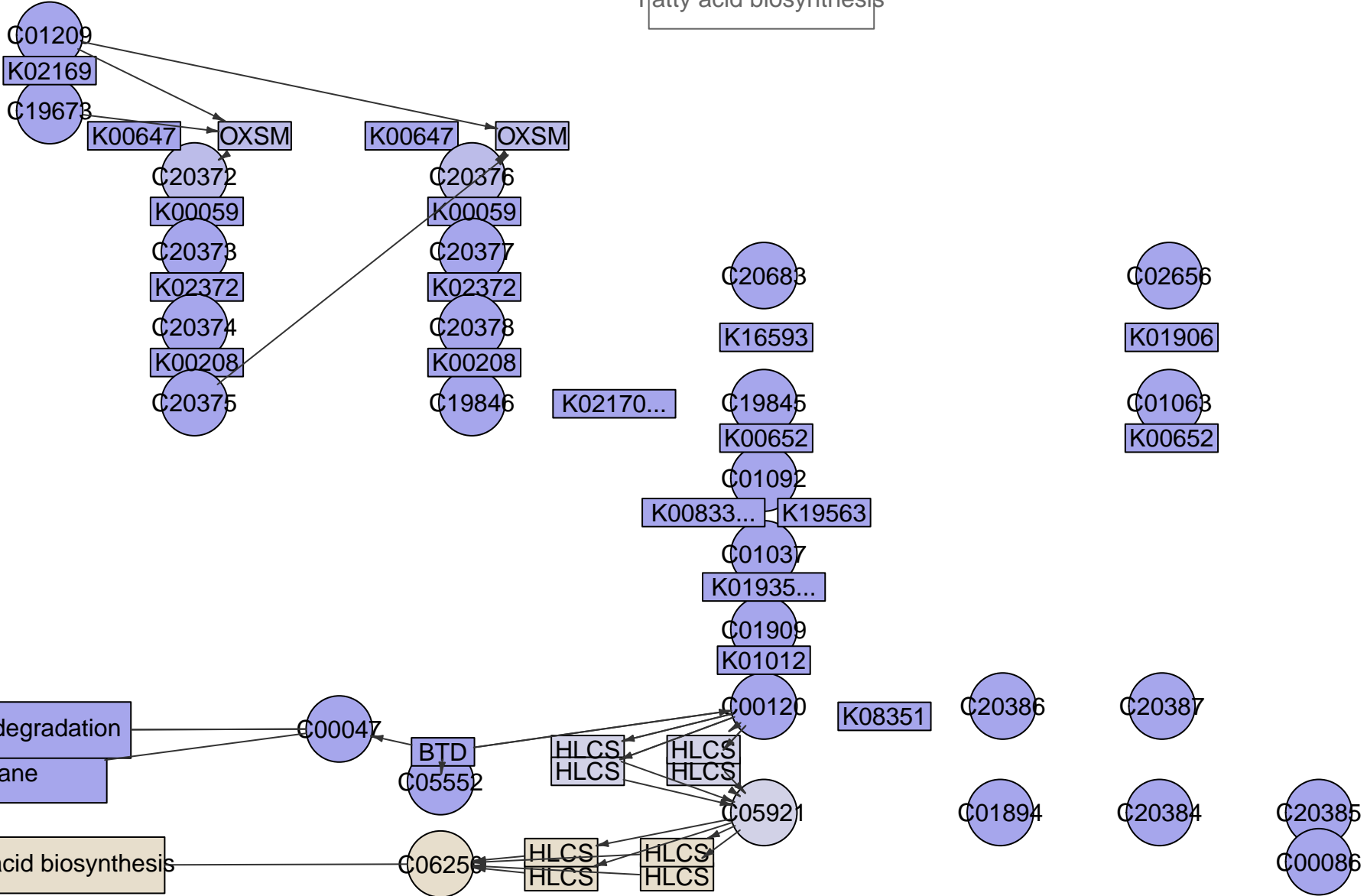
Biotin metabolism  
MPI-090

Fatty acid biosynthesis



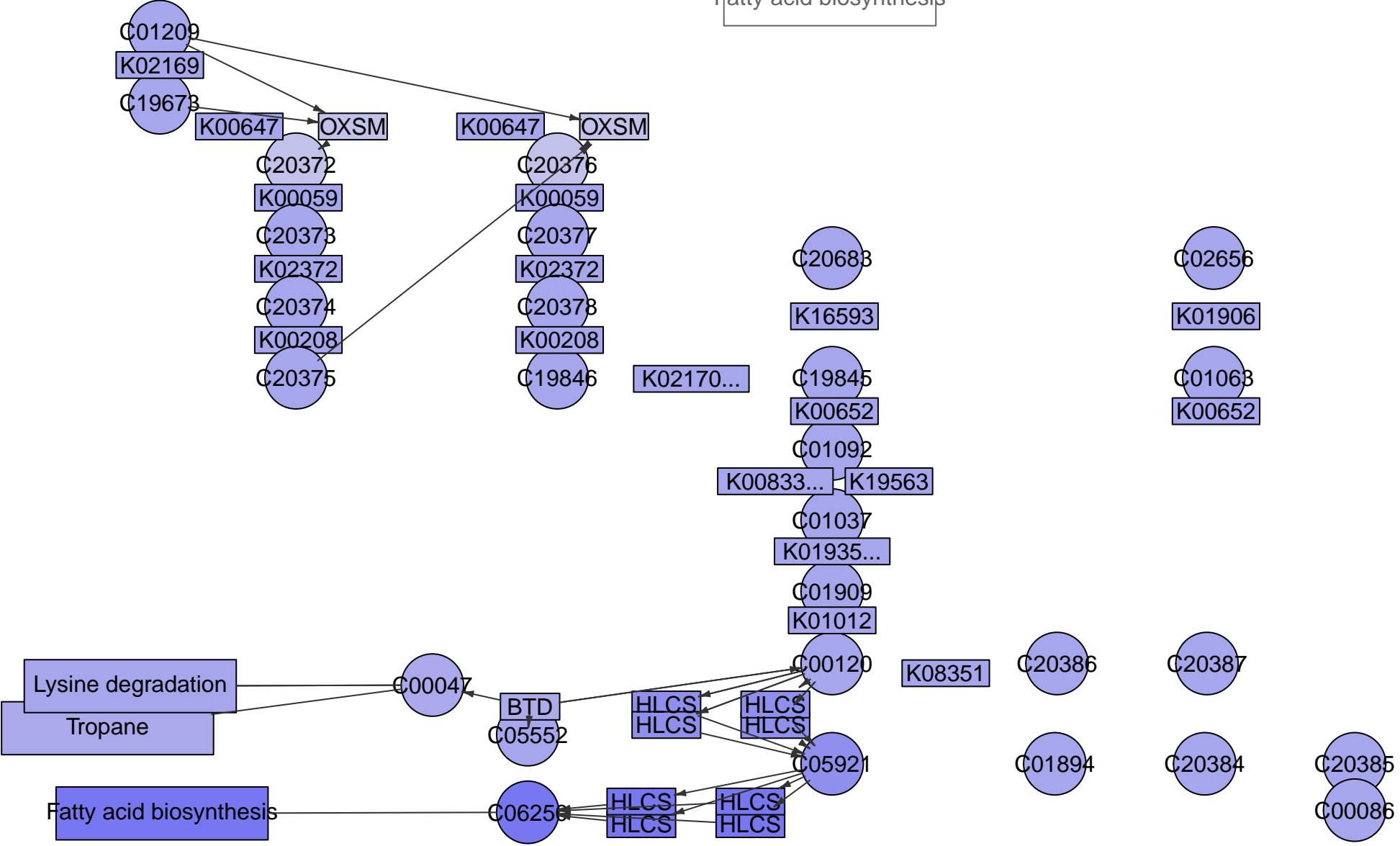
Biotin metabolism  
MPI-091

Fatty acid biosynthesis



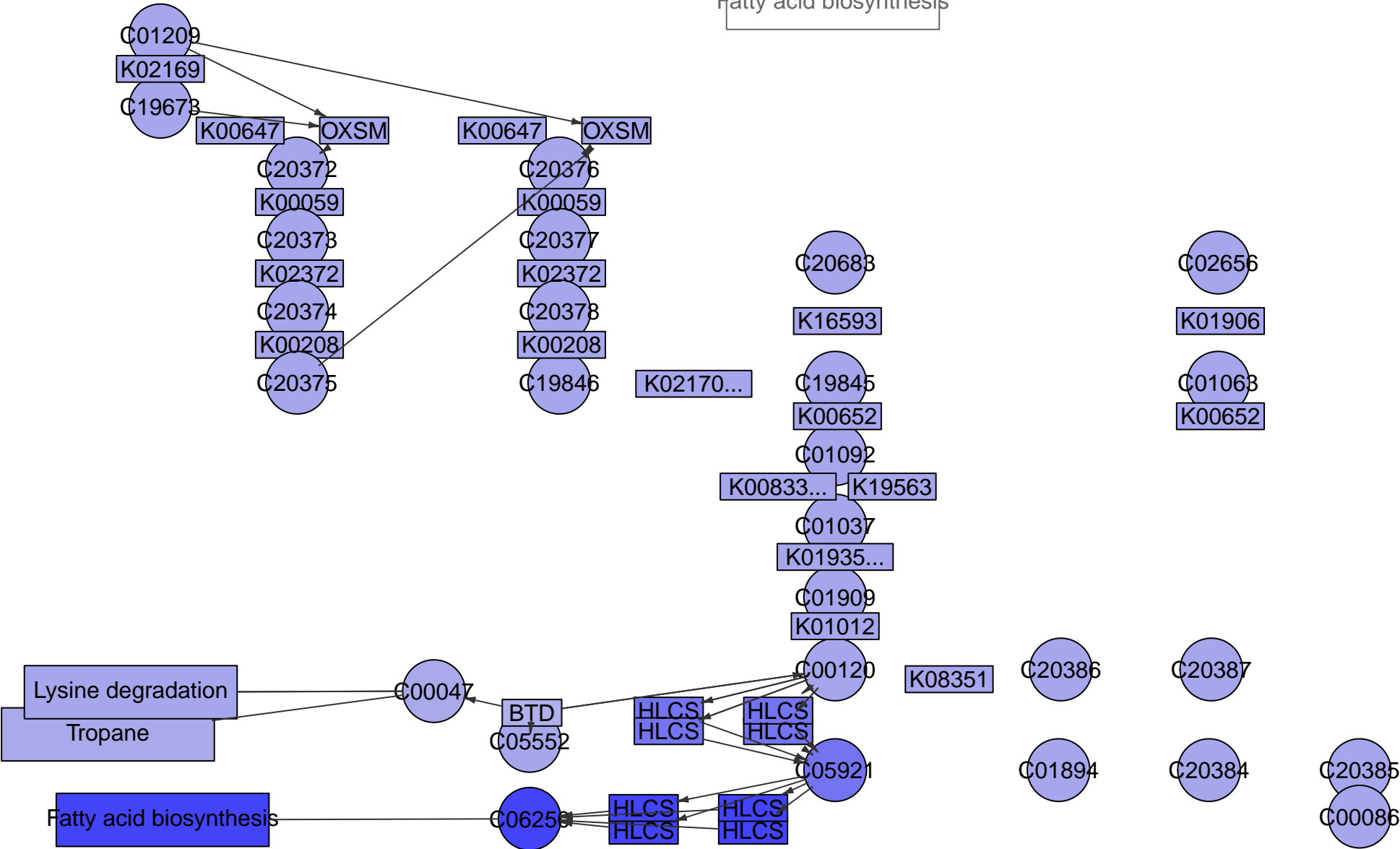
Biotin metabolism  
MPI-095

Fatty acid biosynthesis



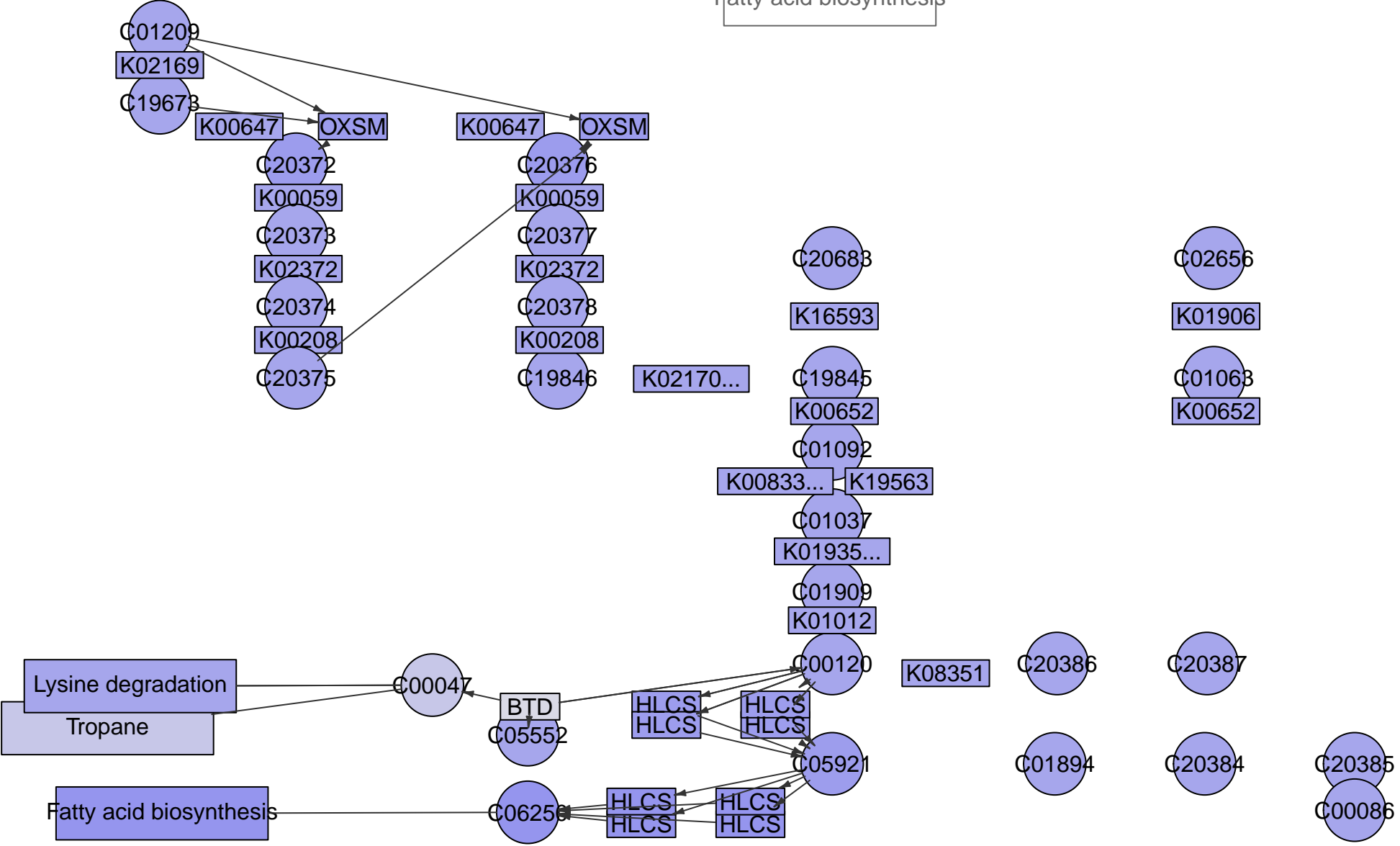
Biotin metabolism  
MPI-101

Fatty acid biosynthesis



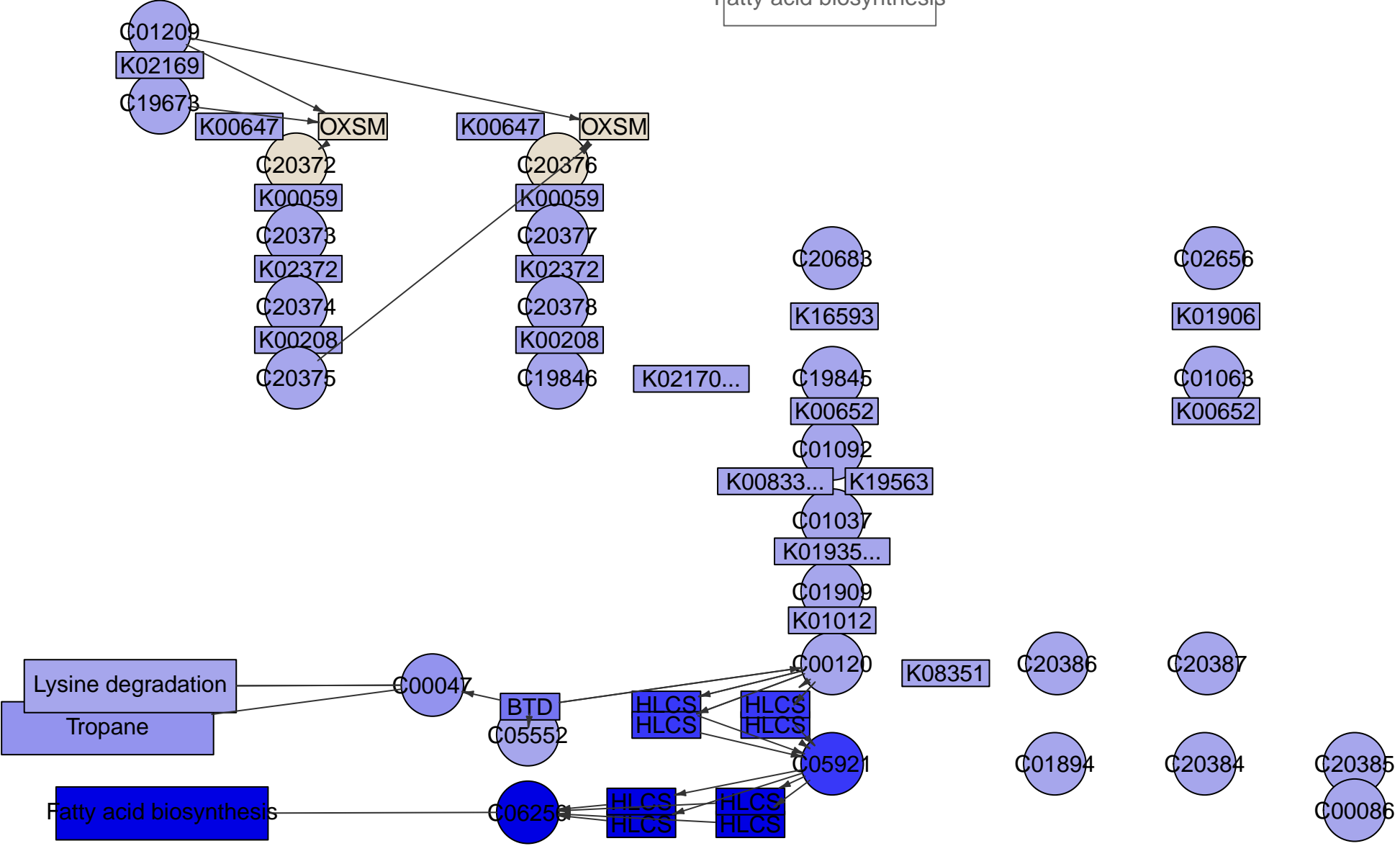
Biotin metabolism  
MPI-114

Fatty acid biosynthesis



Biotin metabolism  
MPI-123

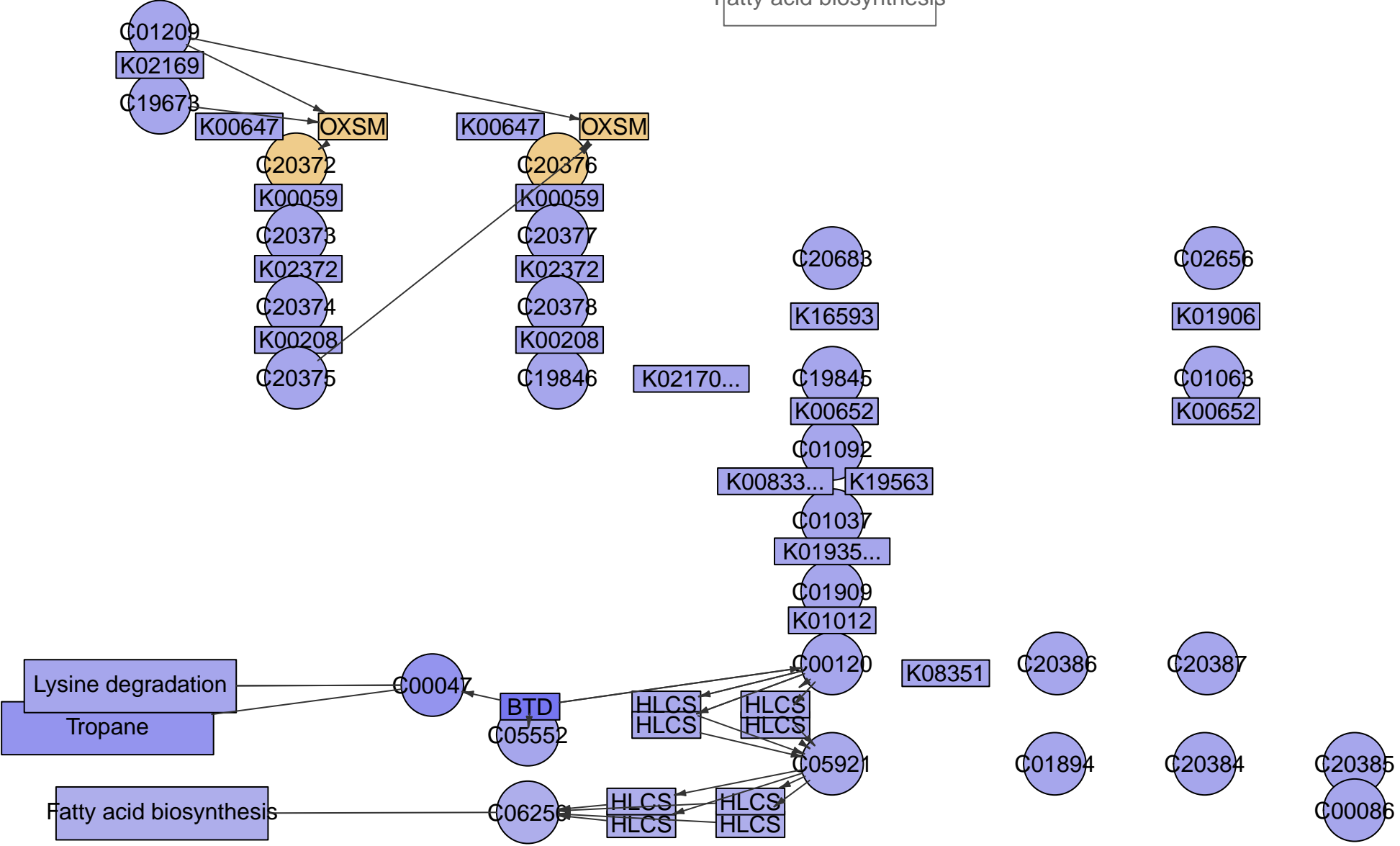
Fatty acid biosynthesis





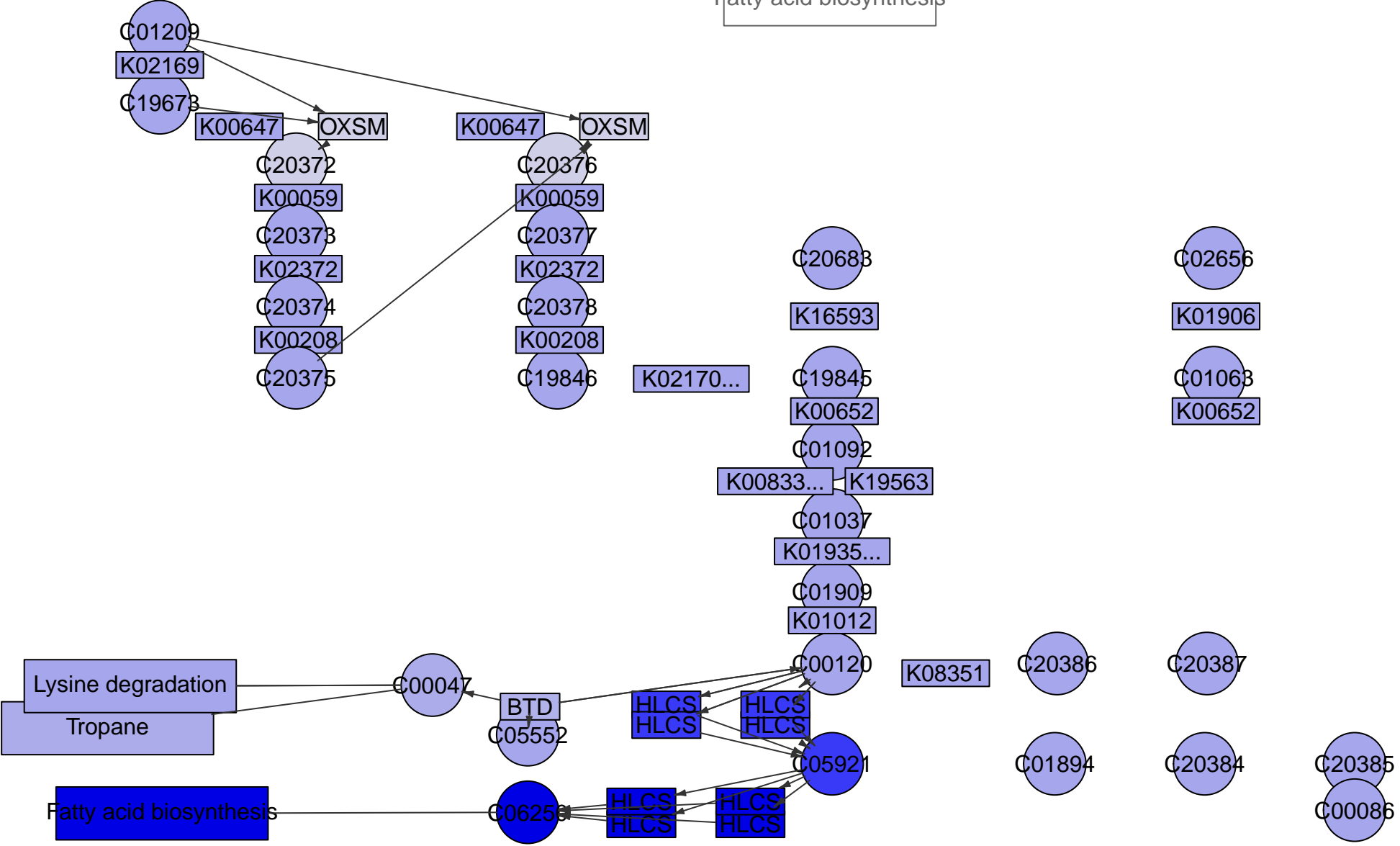
Biotin metabolism  
MPI-138

Fatty acid biosynthesis



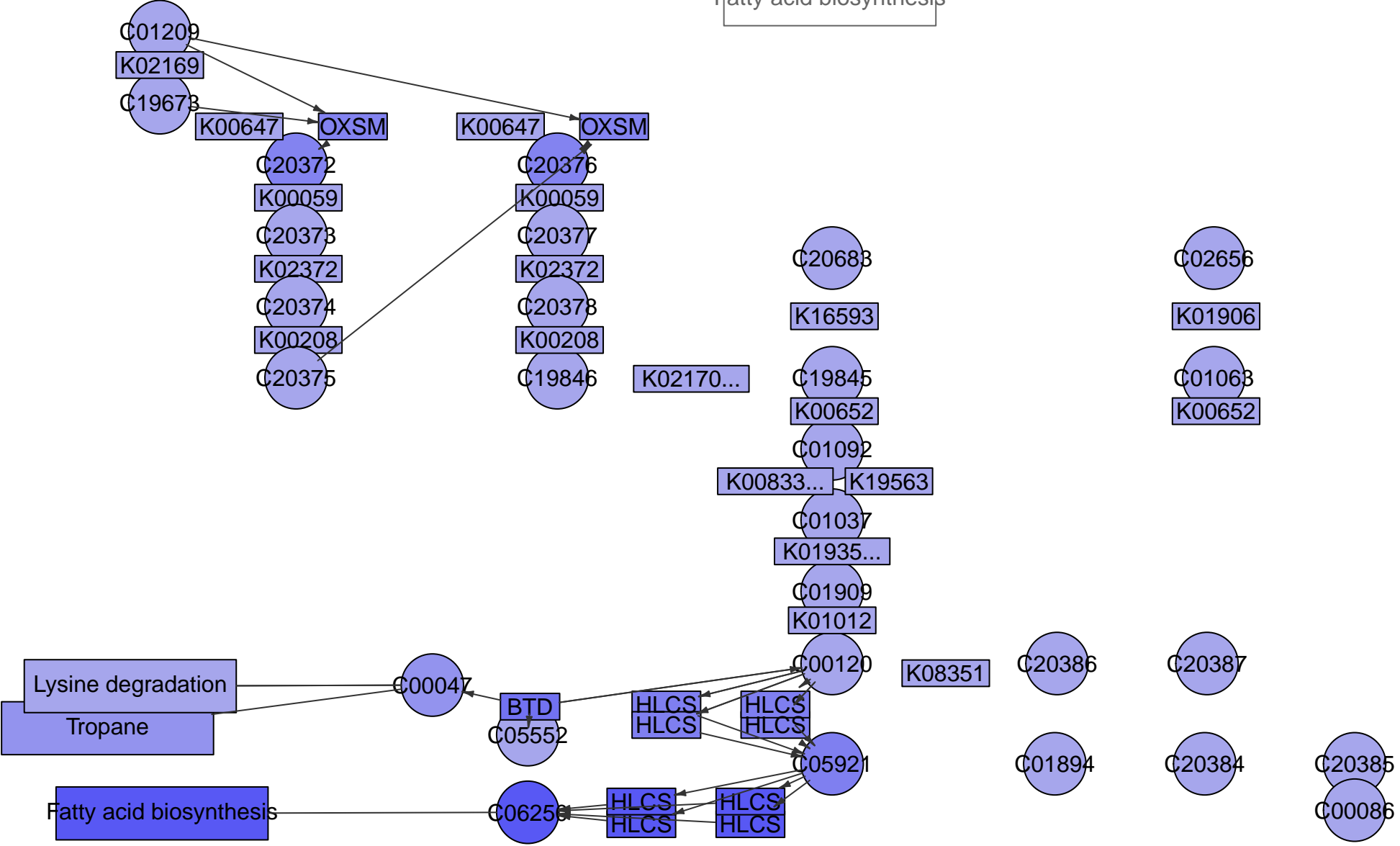
Biotin metabolism  
MPI-139

Fatty acid biosynthesis



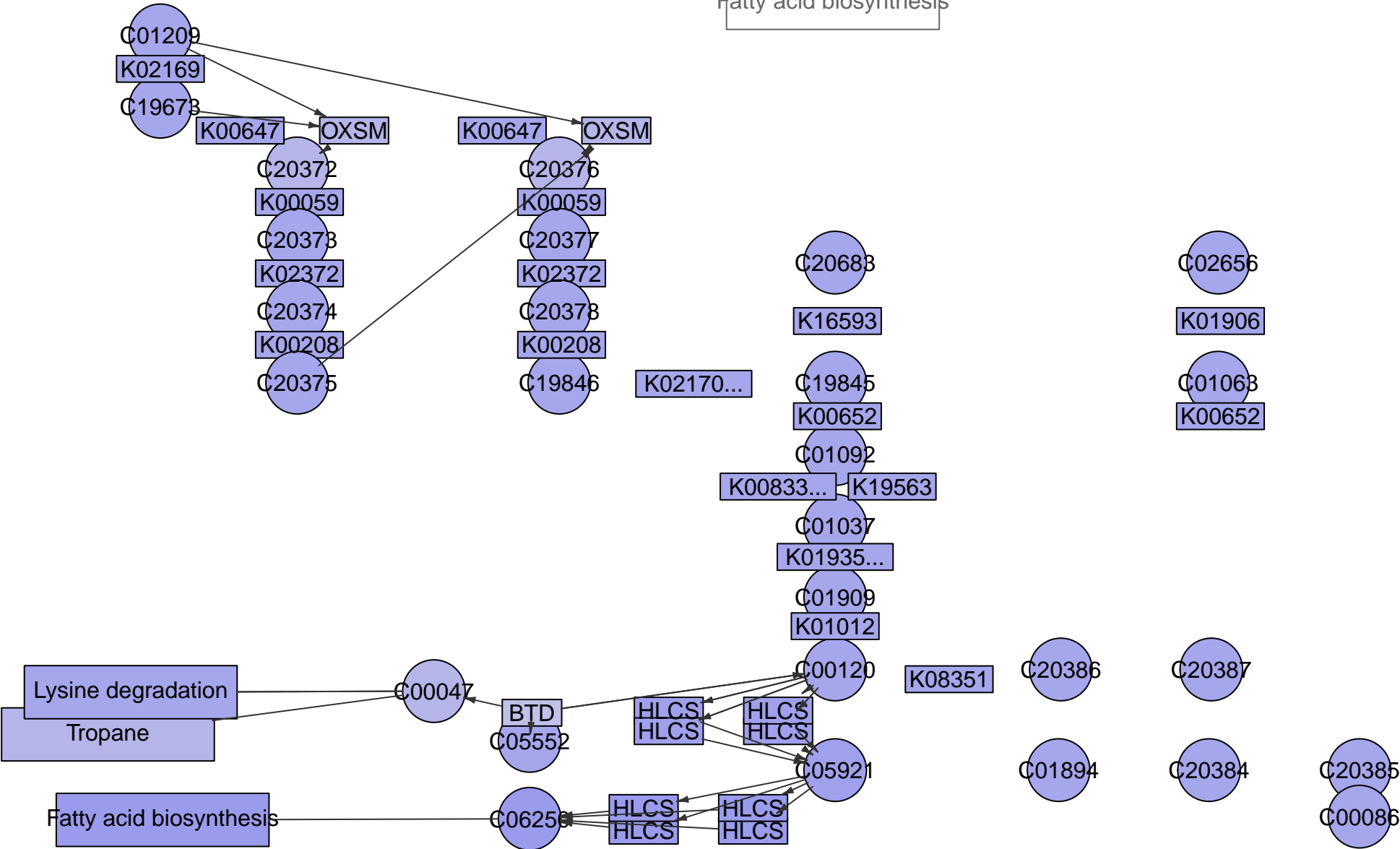
Biotin metabolism  
MPI-140

Fatty acid biosynthesis



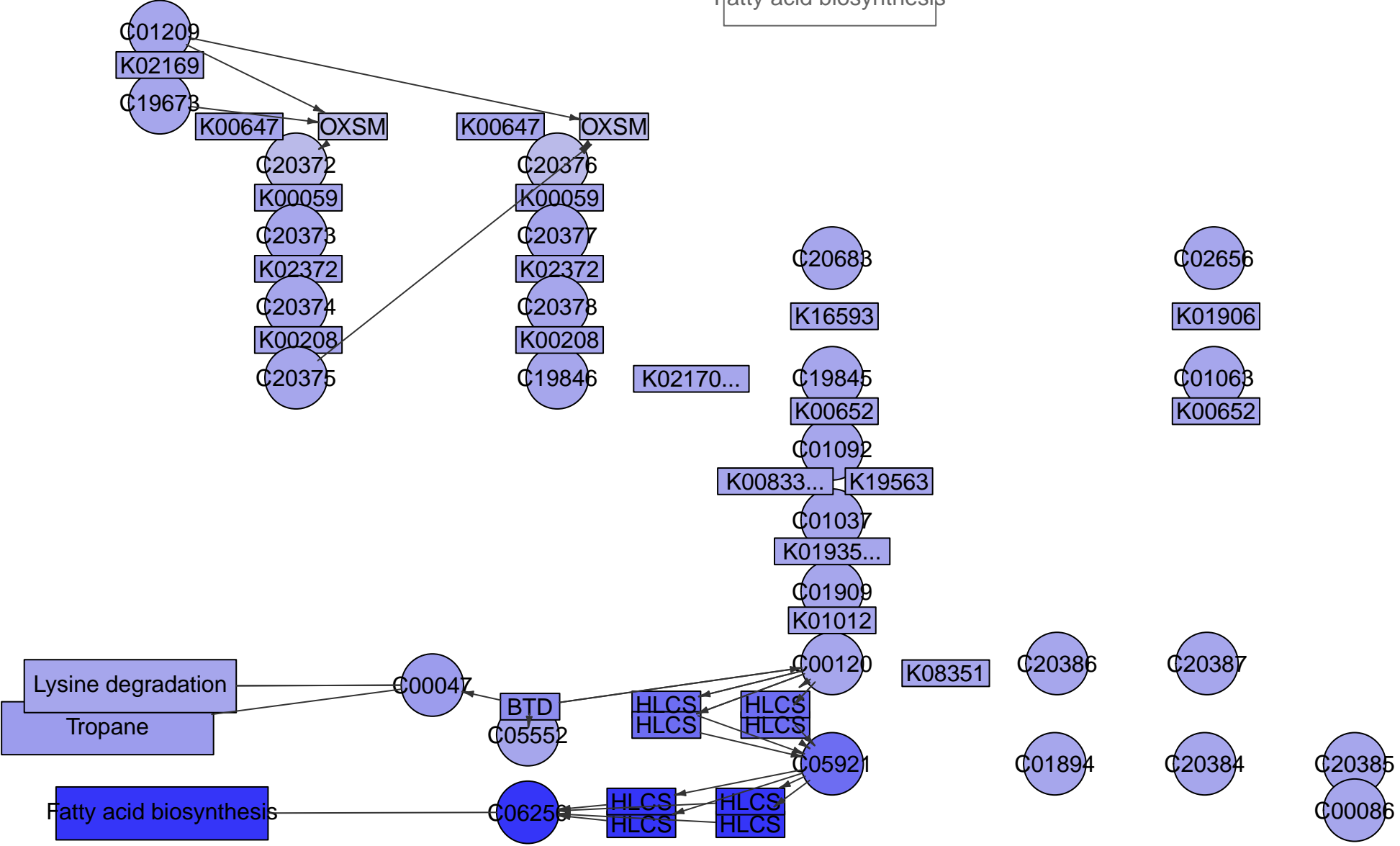
Biotin metabolism  
MPI-144

Fatty acid biosynthesis



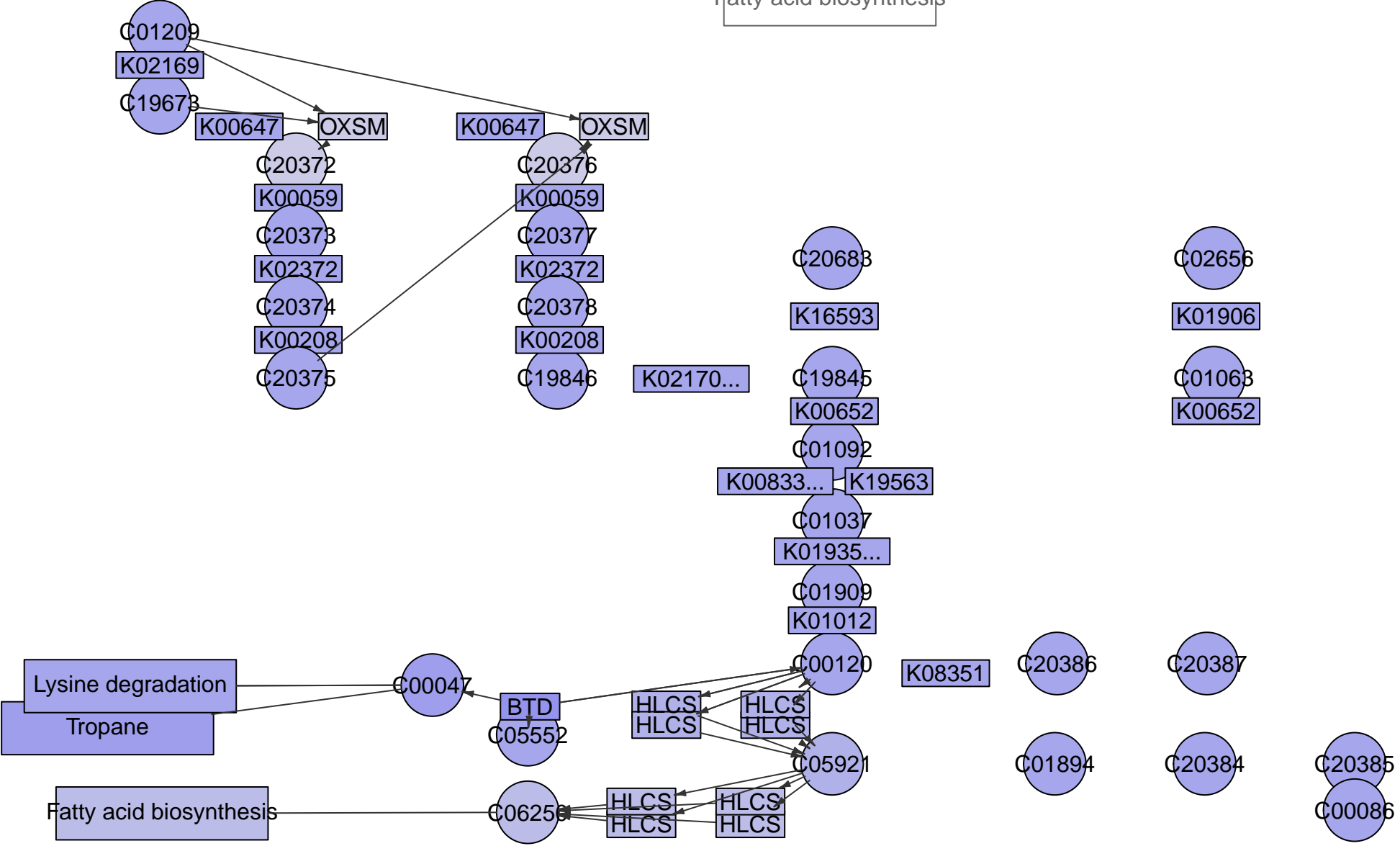
Biotin metabolism  
MPI-147

Fatty acid biosynthesis



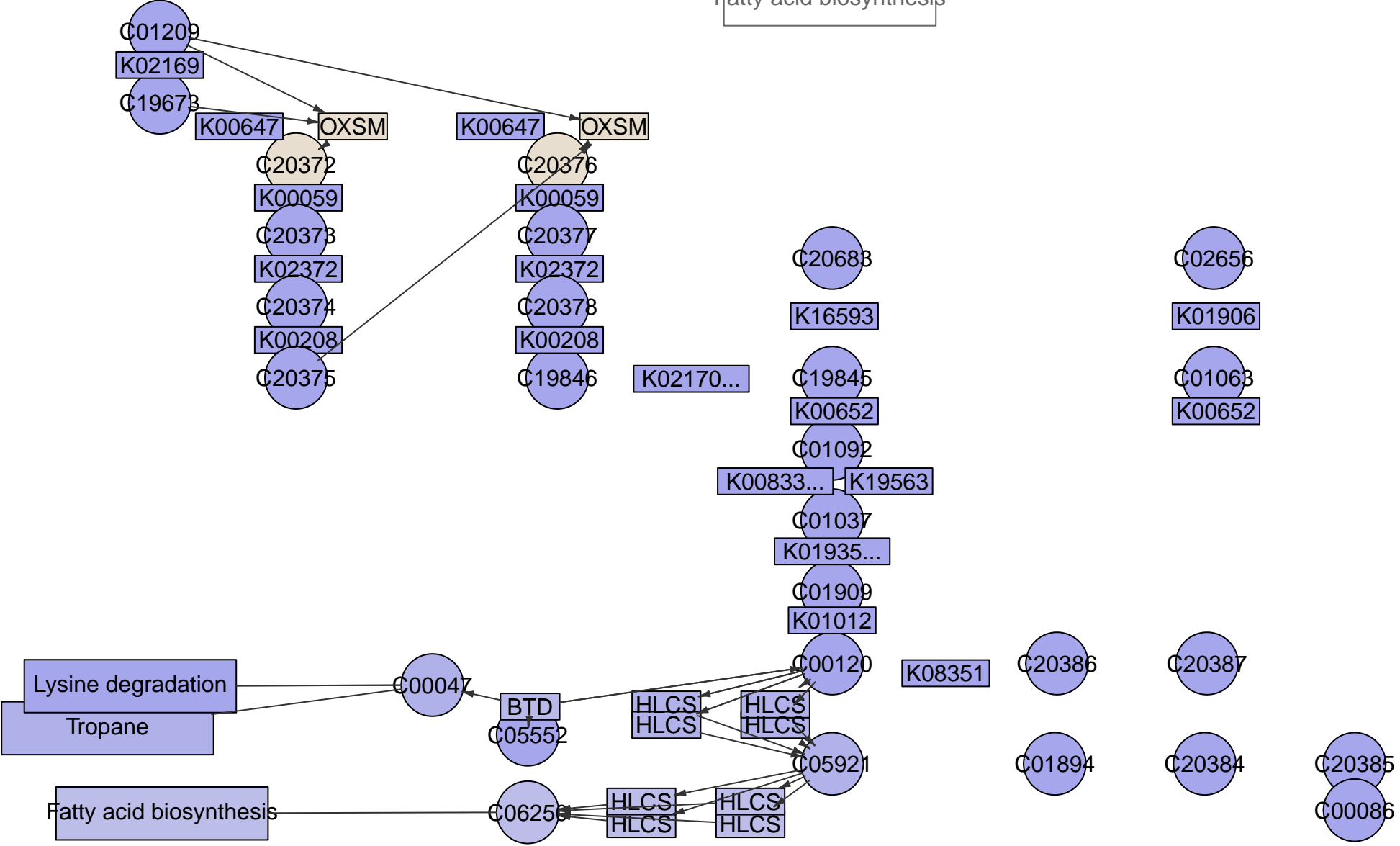
Biotin metabolism  
MPI-171

Fatty acid biosynthesis



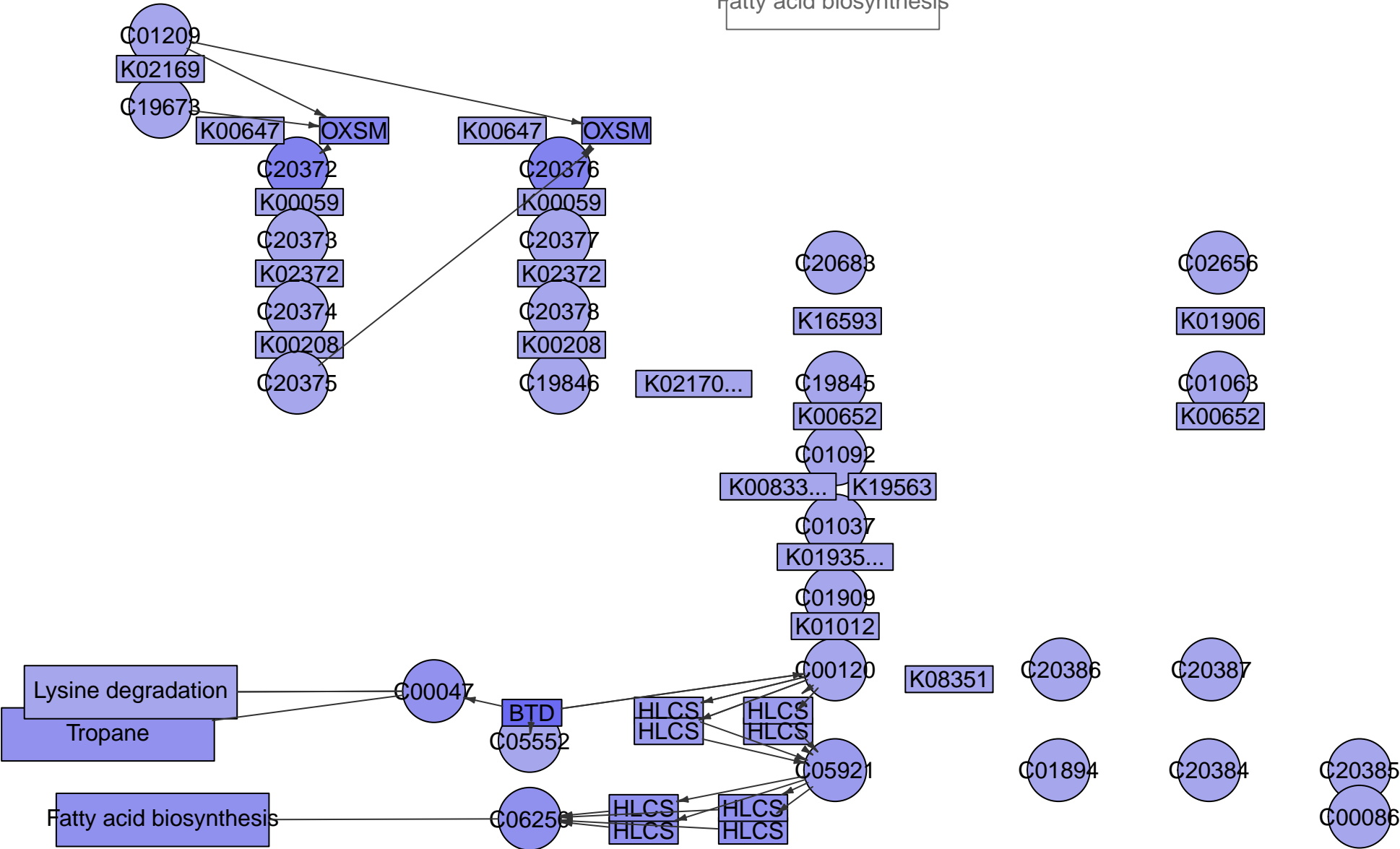
Biotin metabolism  
MPI-172

Fatty acid biosynthesis



Biotin metabolism  
MPI-007

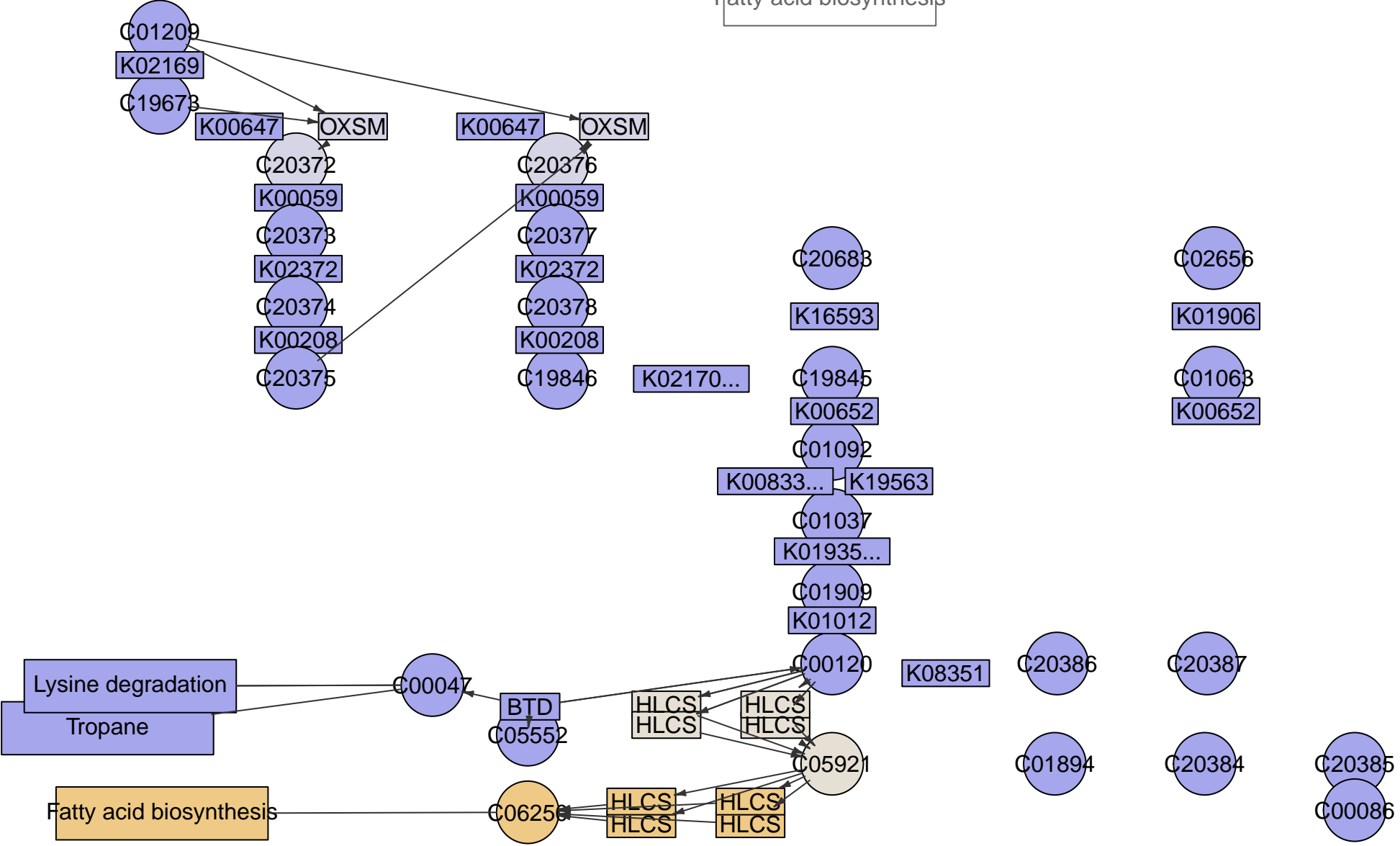
Fatty acid biosynthesis





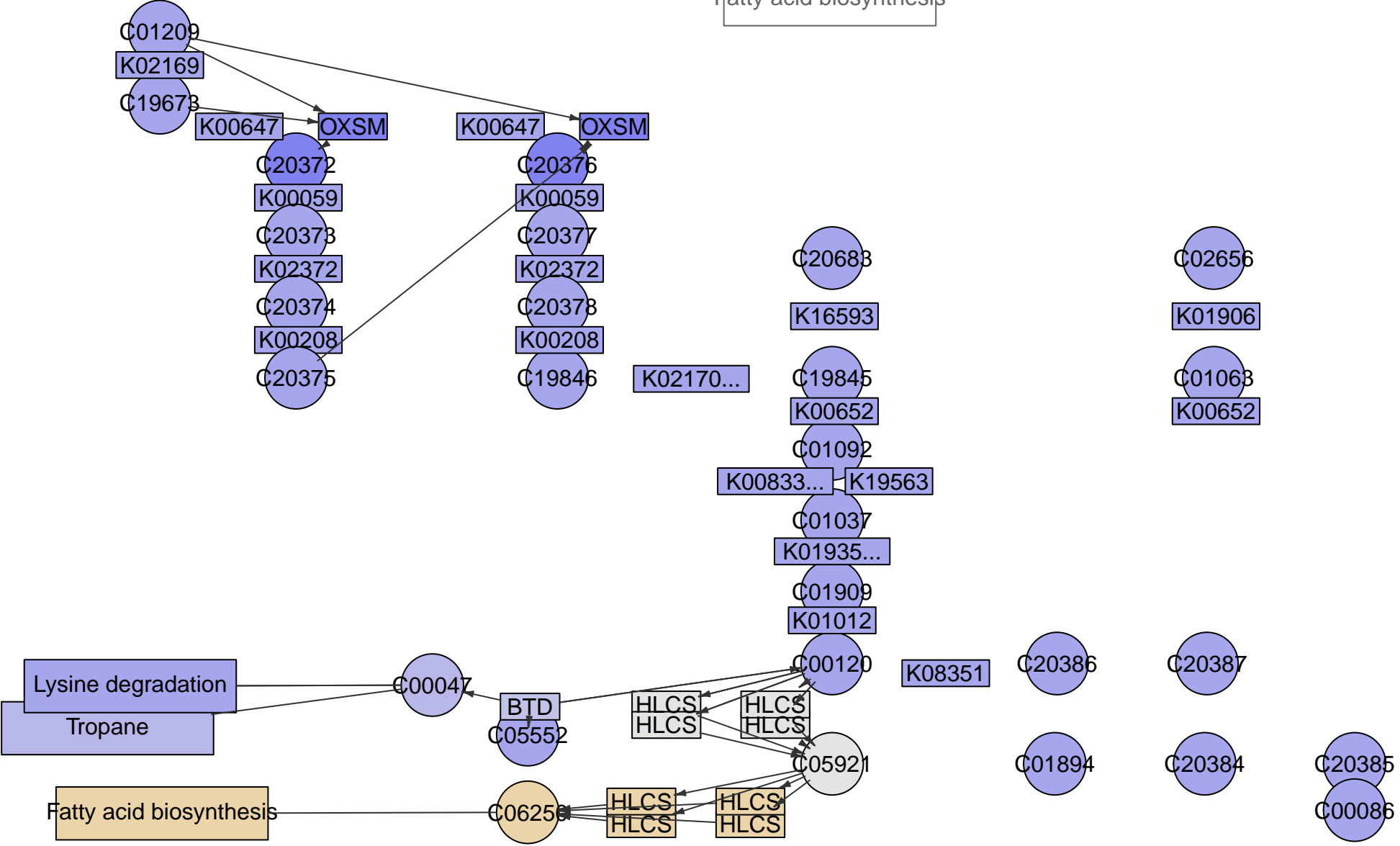
Biotin metabolism  
MPI-011

Fatty acid biosynthesis



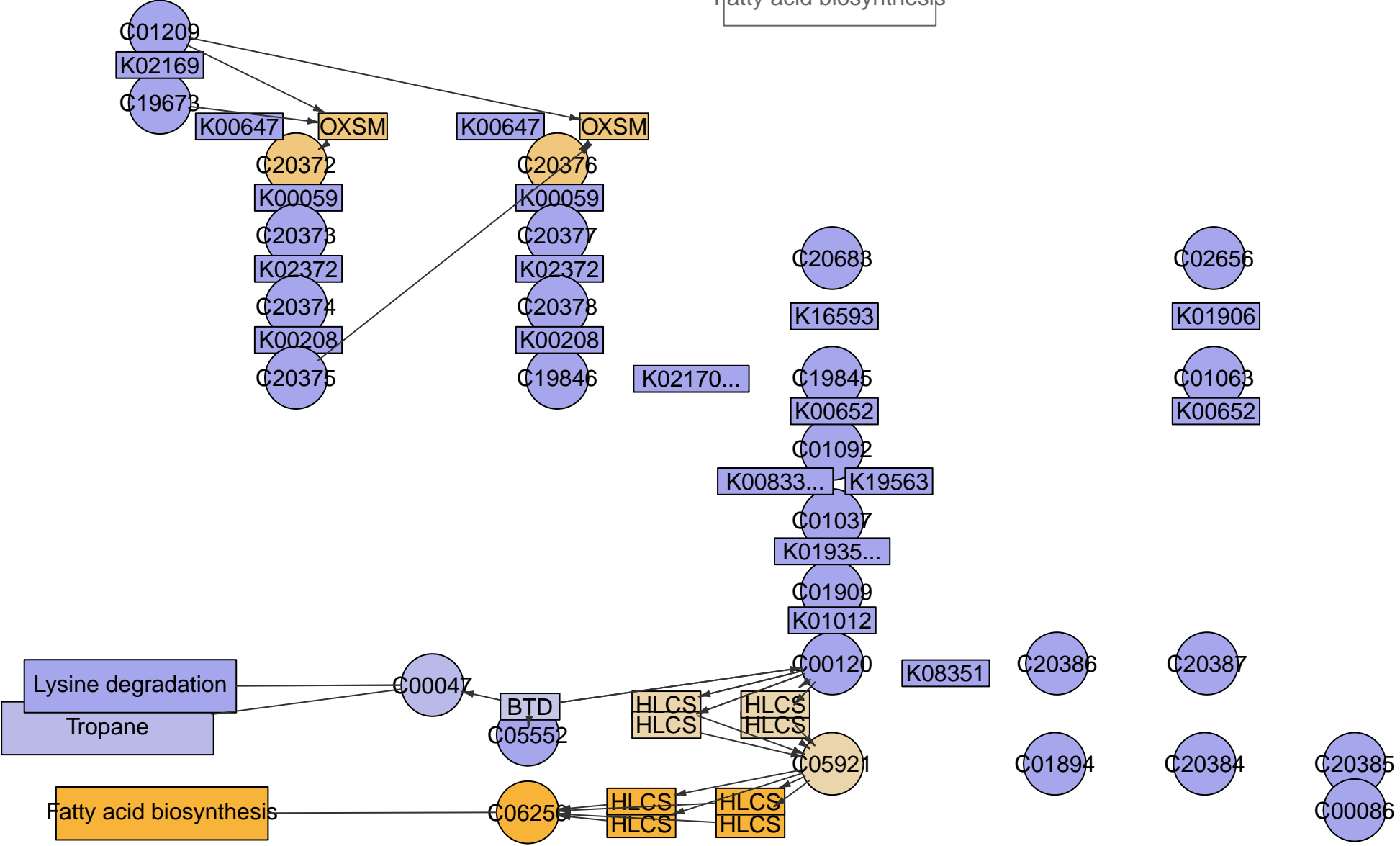
Biotin metabolism  
MPI-024

Fatty acid biosynthesis



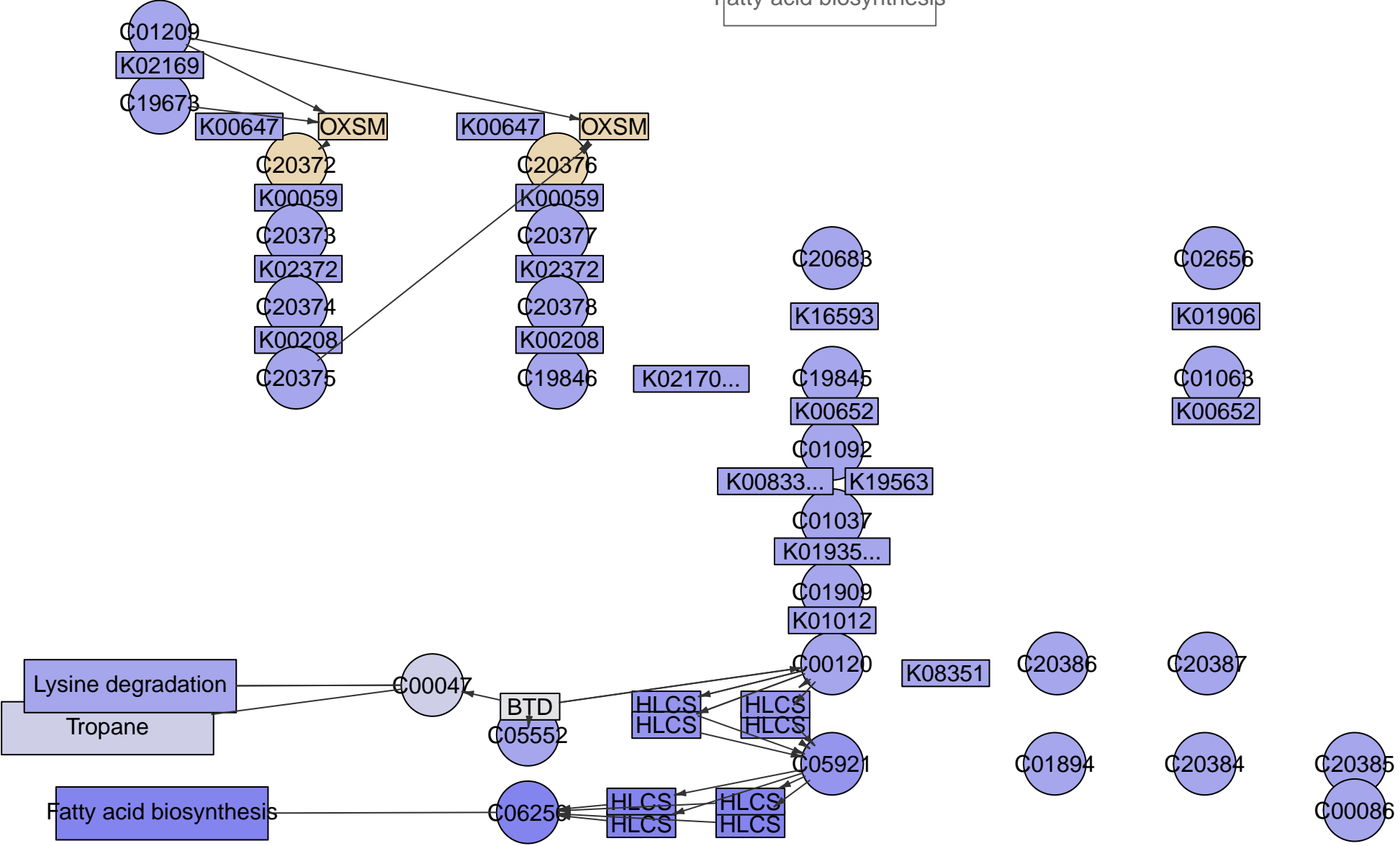
Biotin metabolism  
MPI-026

Fatty acid biosynthesis



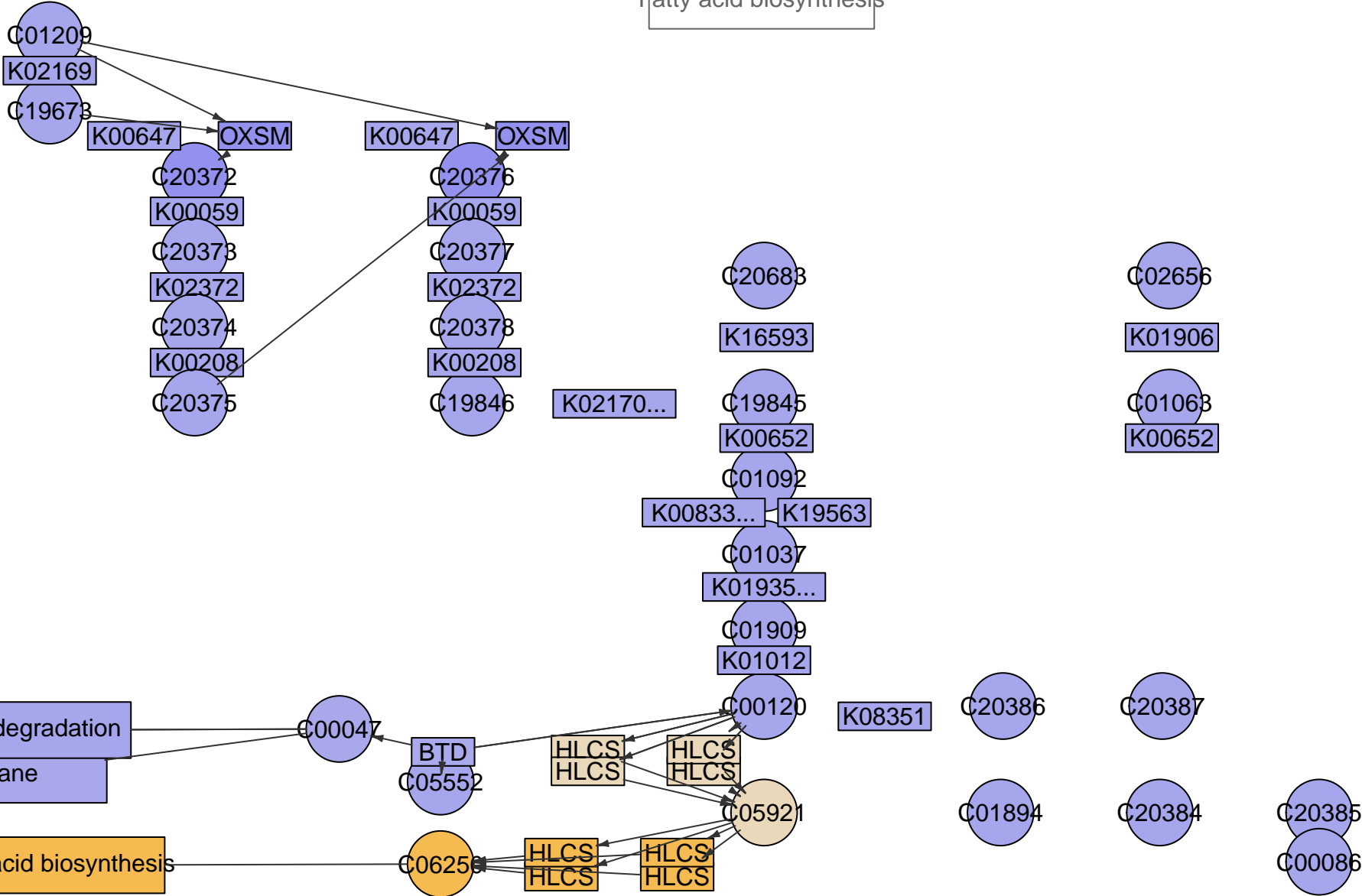
Biotin metabolism  
MPI-036

Fatty acid biosynthesis



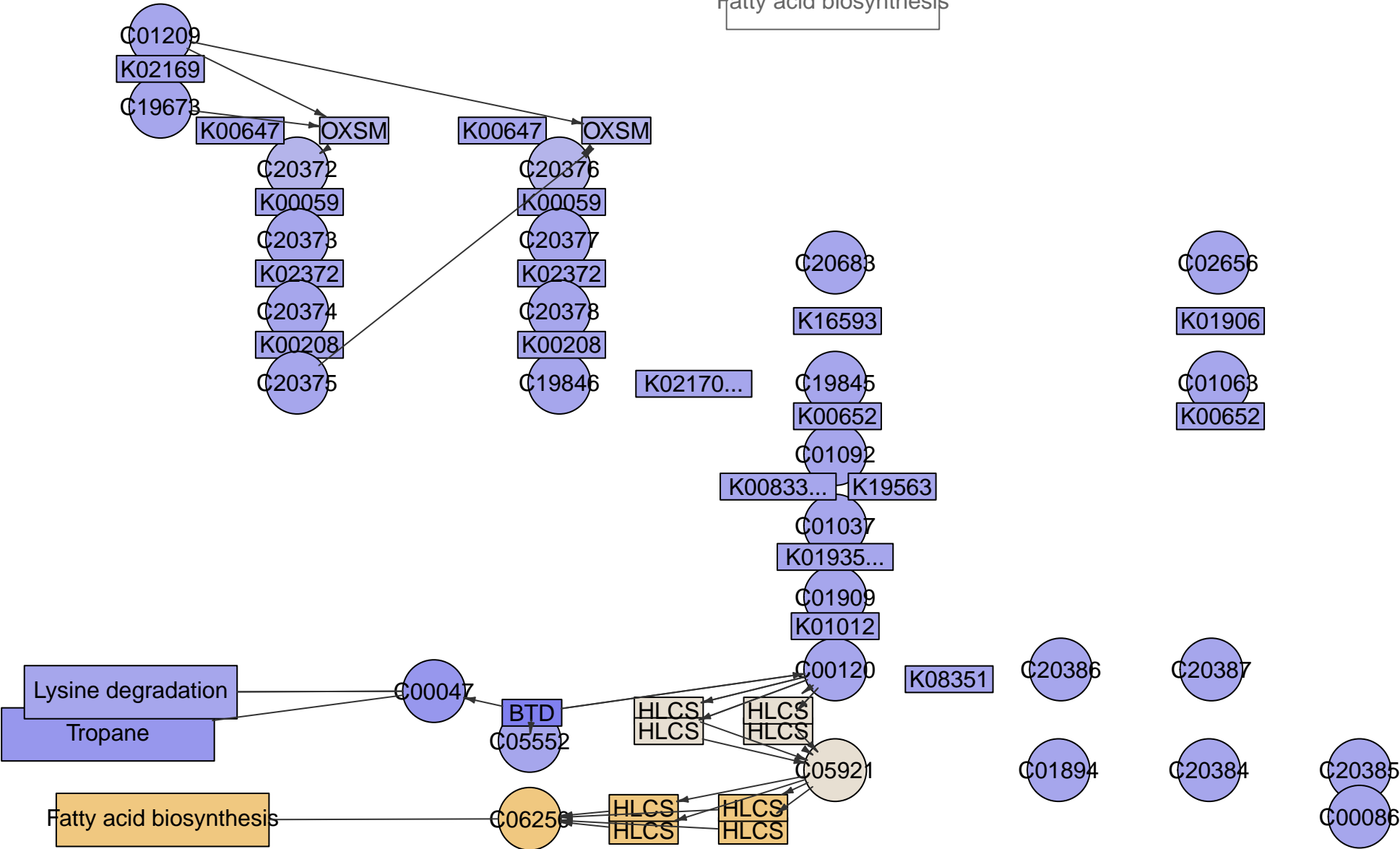
Biotin metabolism  
MPI-037

Fatty acid biosynthesis



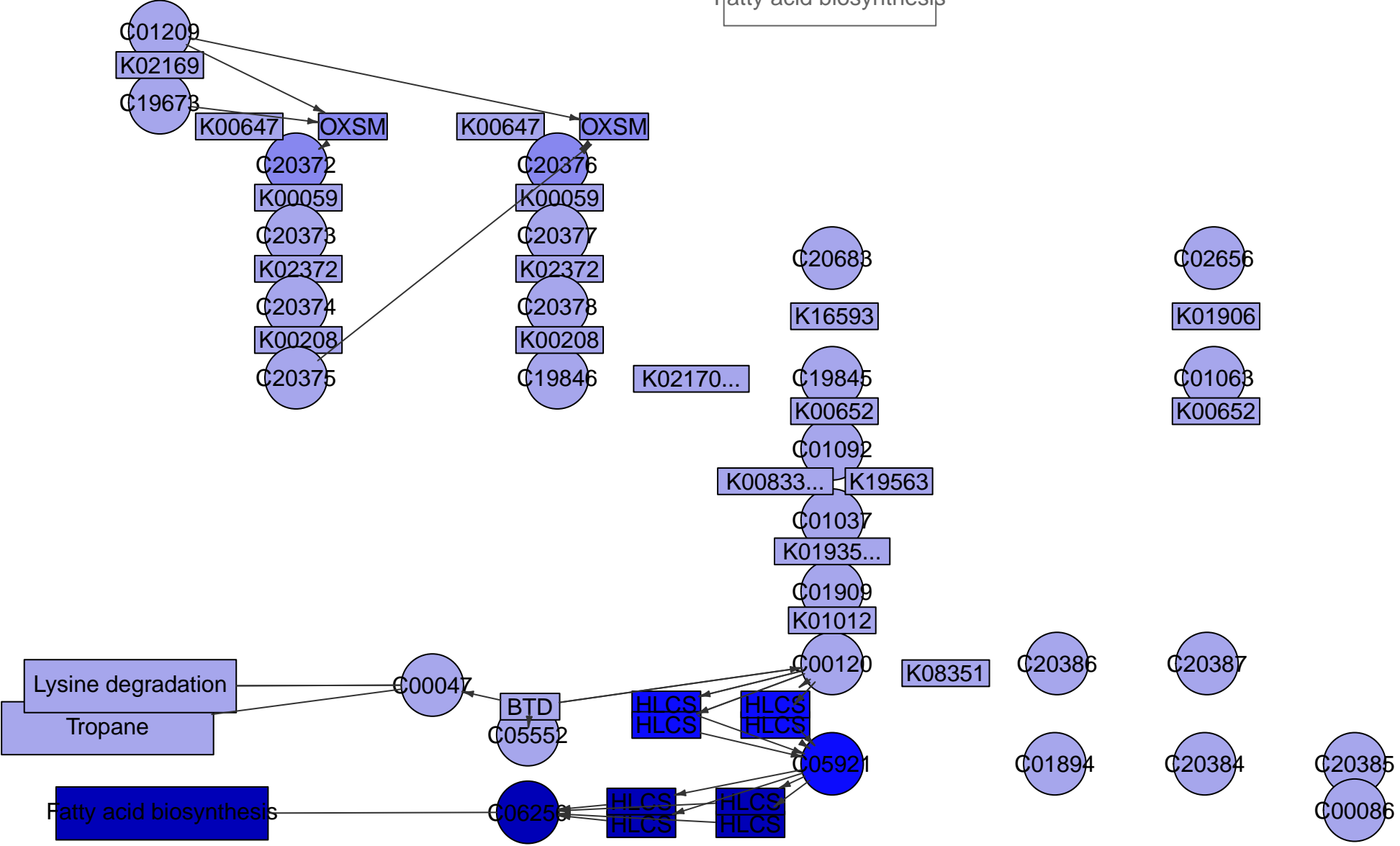
Biotin metabolism  
MPI-038

Fatty acid biosynthesis



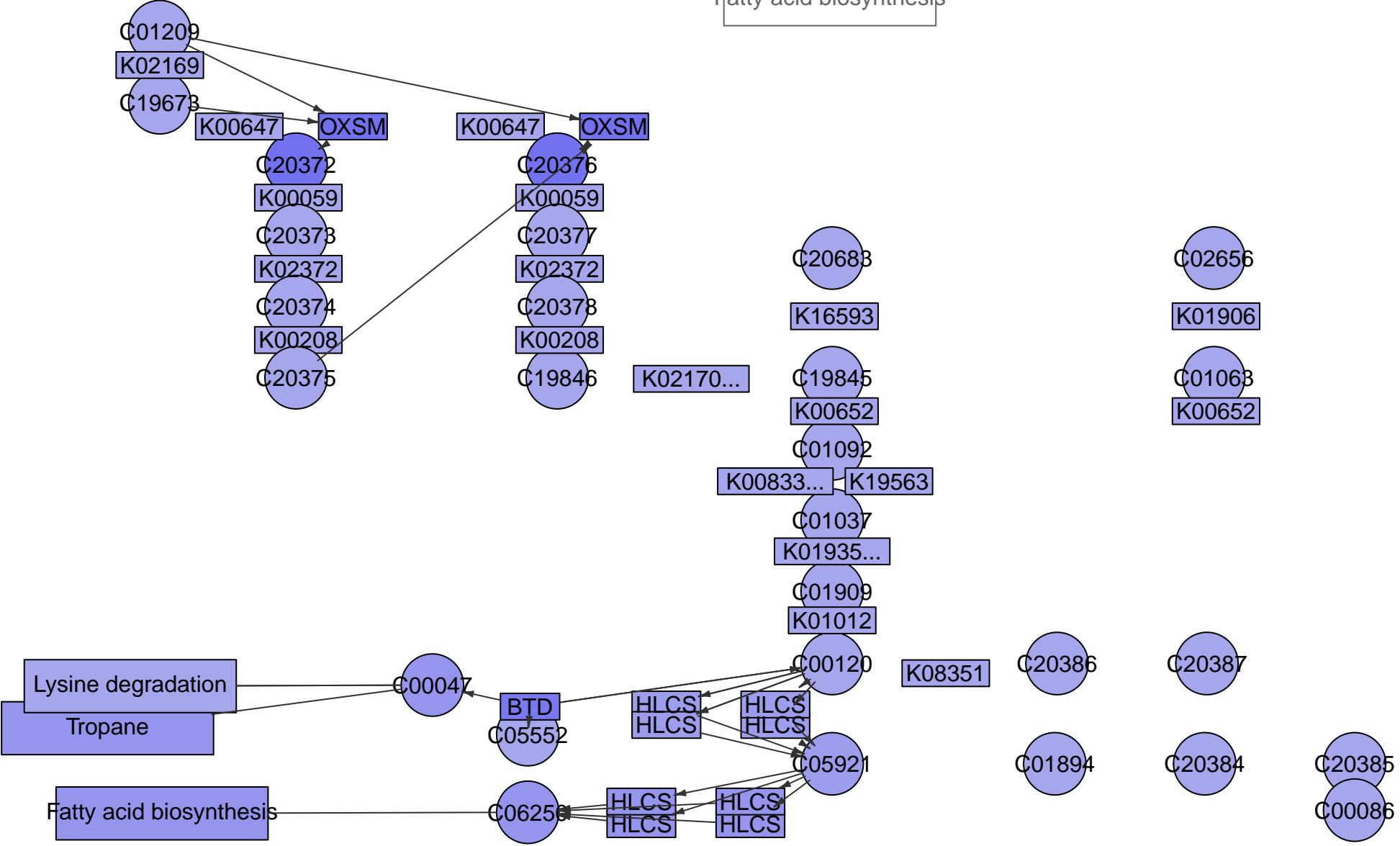
Biotin metabolism  
MPI-041

Fatty acid biosynthesis



Biotin metabolism  
MPI-046

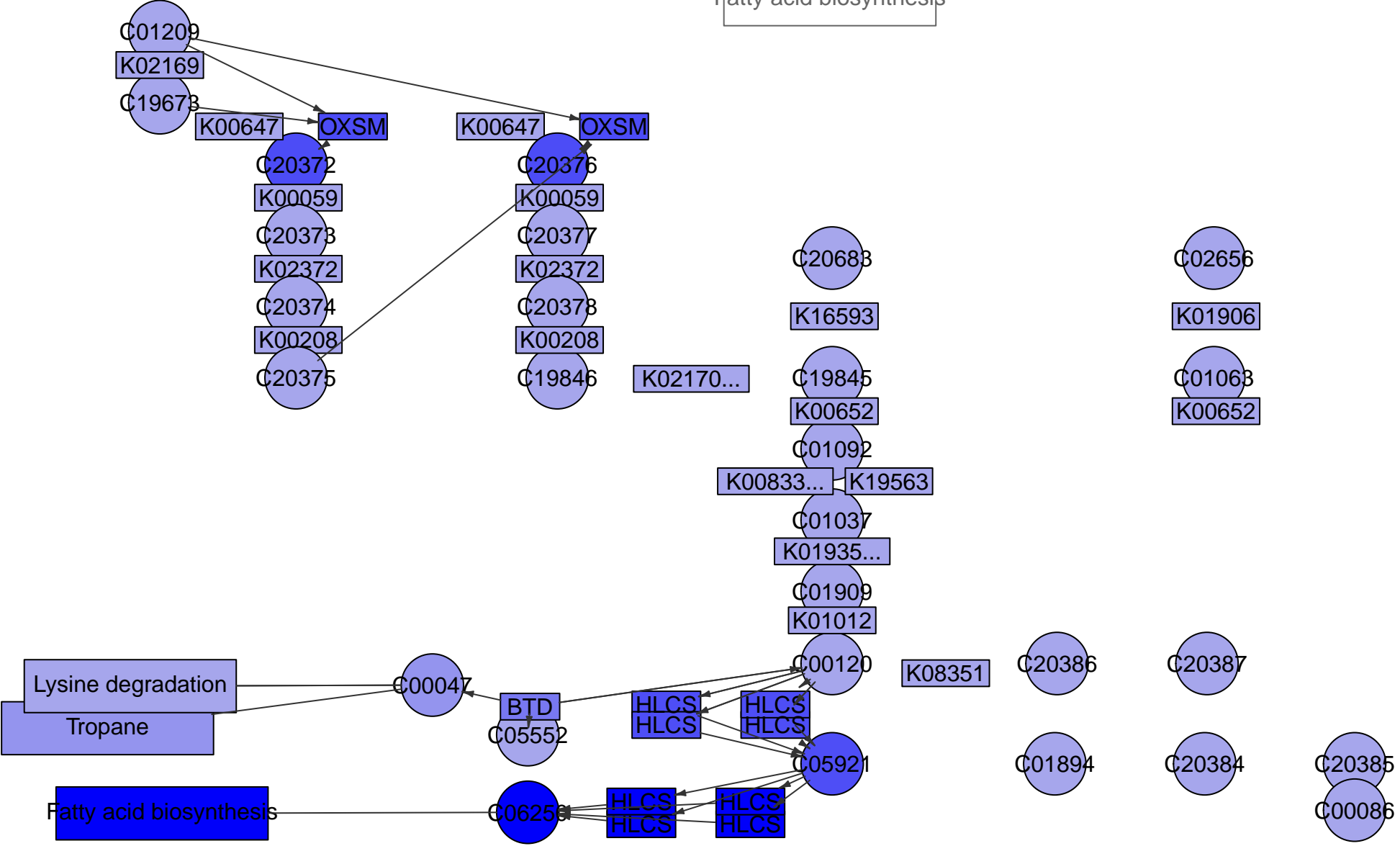
Fatty acid biosynthesis





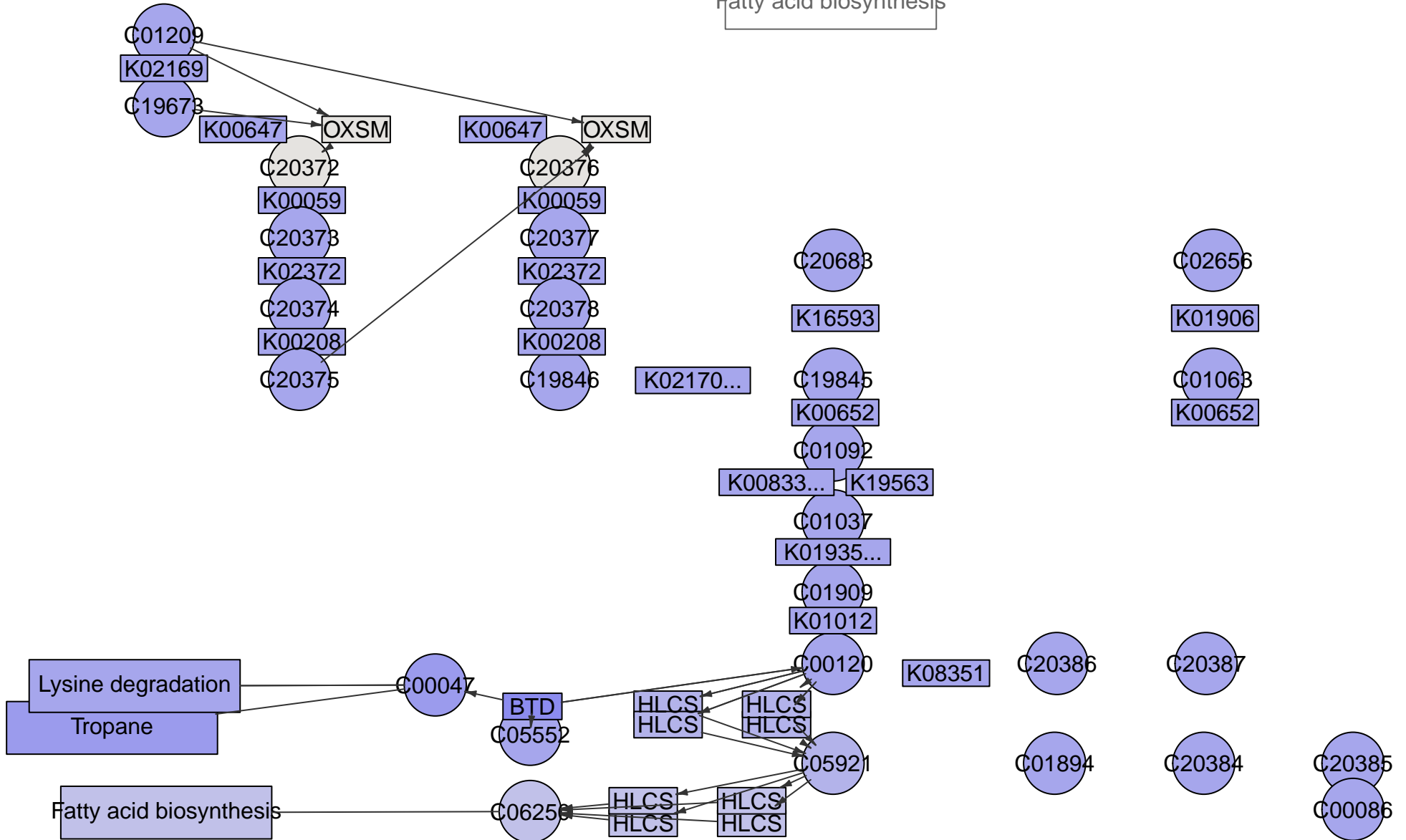
Biotin metabolism  
MPI-050

Fatty acid biosynthesis



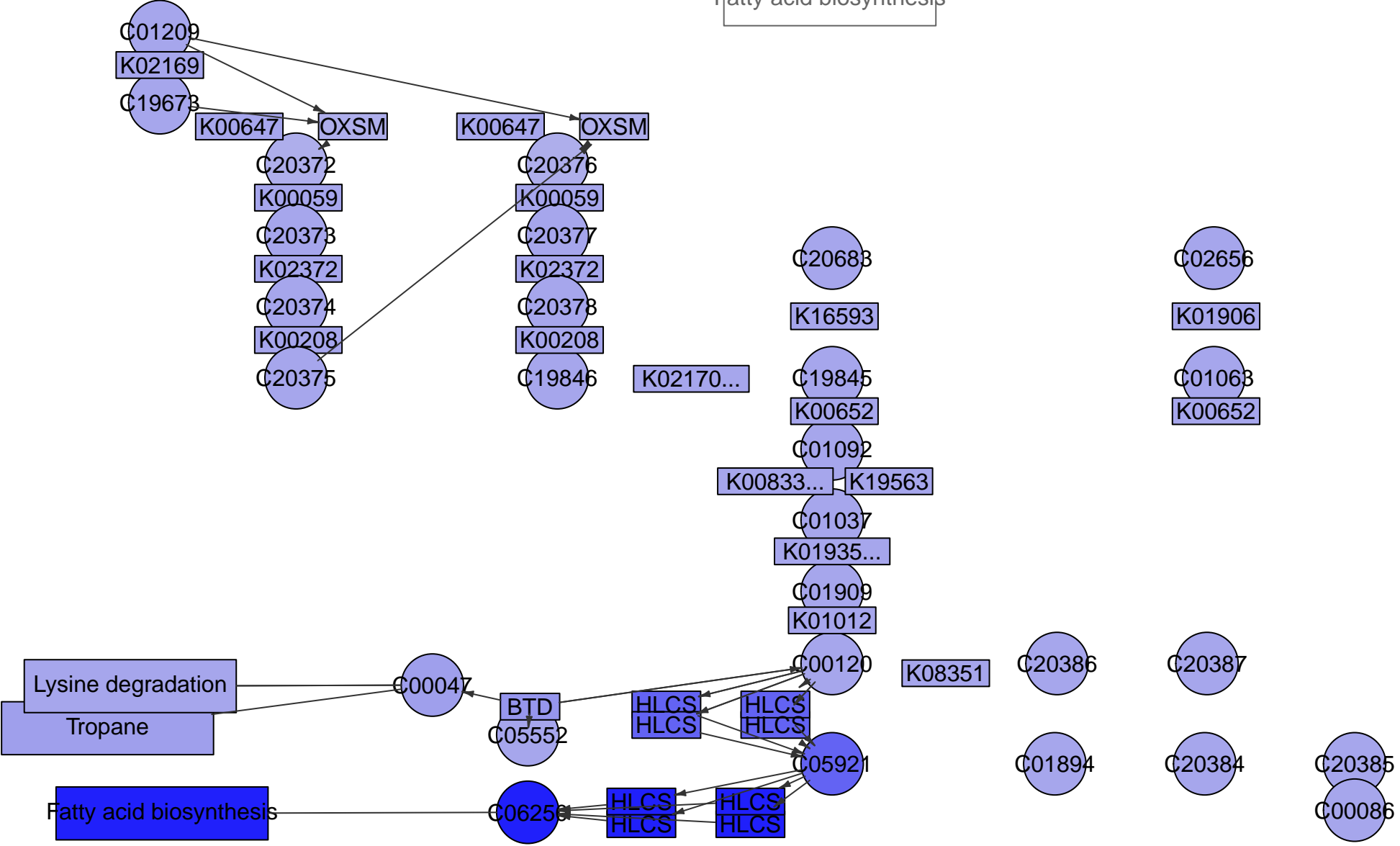
**Biotin metabolism**  
MPI-051

Fatty acid biosynthesis



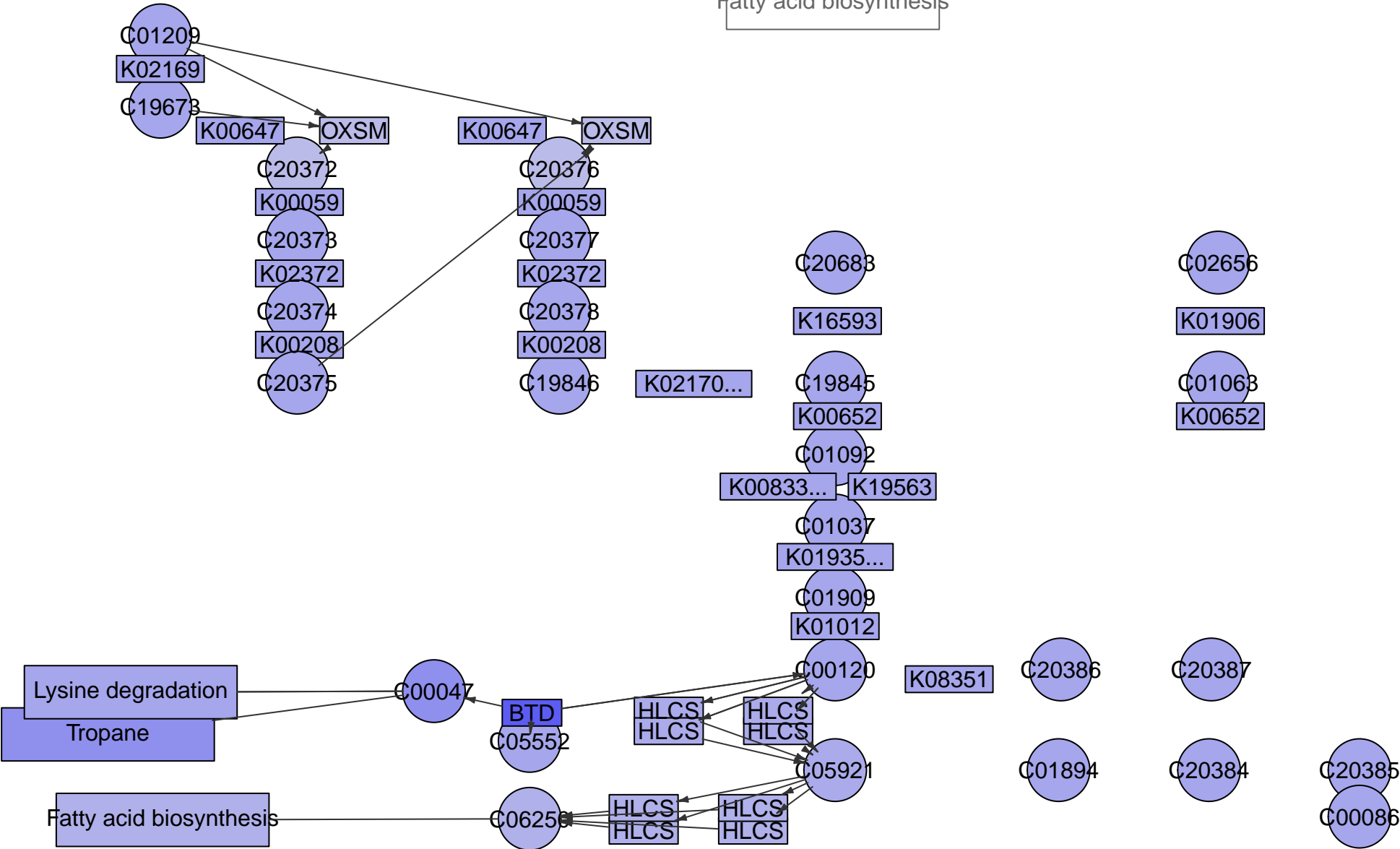
Biotin metabolism  
MPI-054

Fatty acid biosynthesis



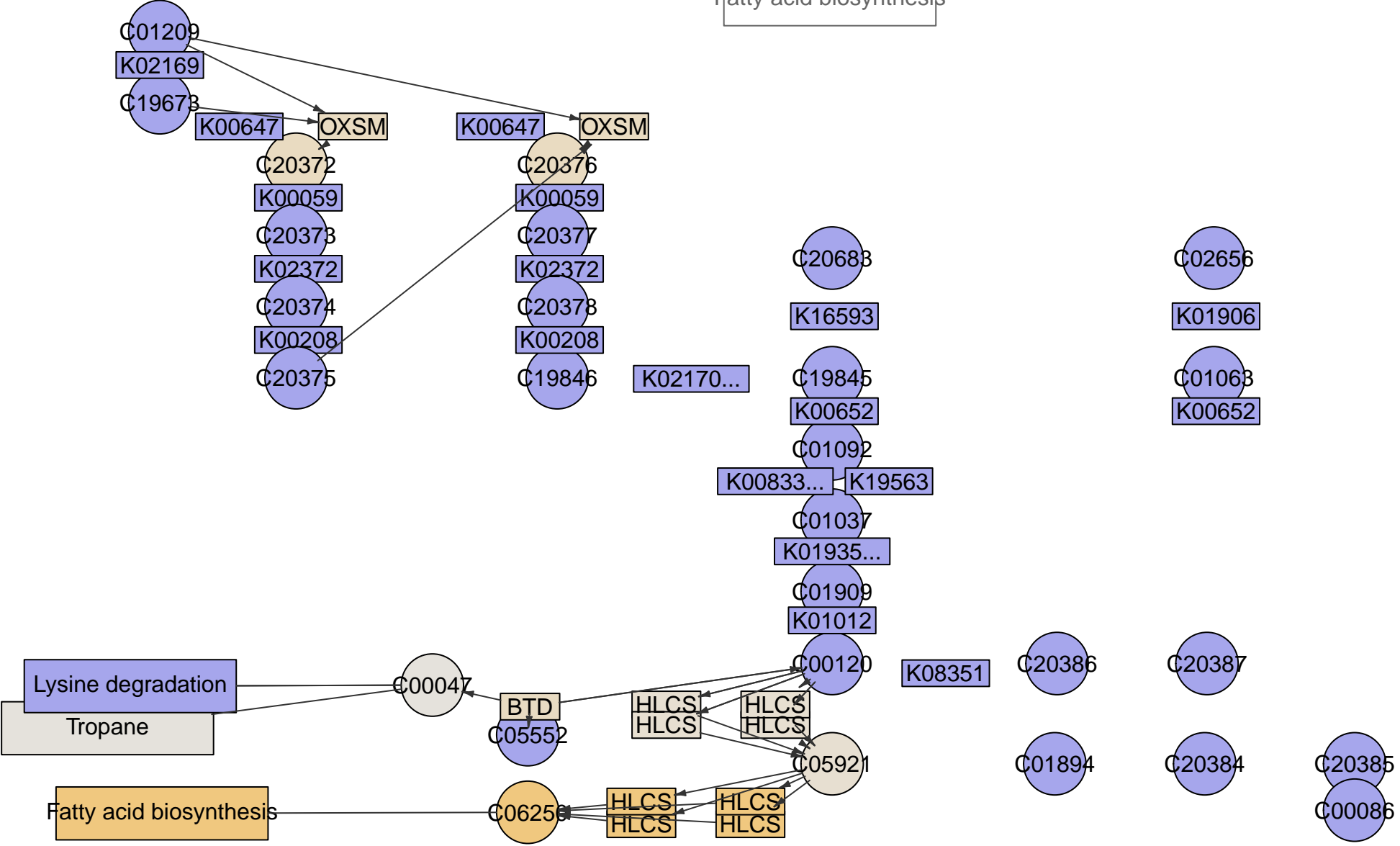
**Biotin metabolism**  
MPI-059

Fatty acid biosynthesis



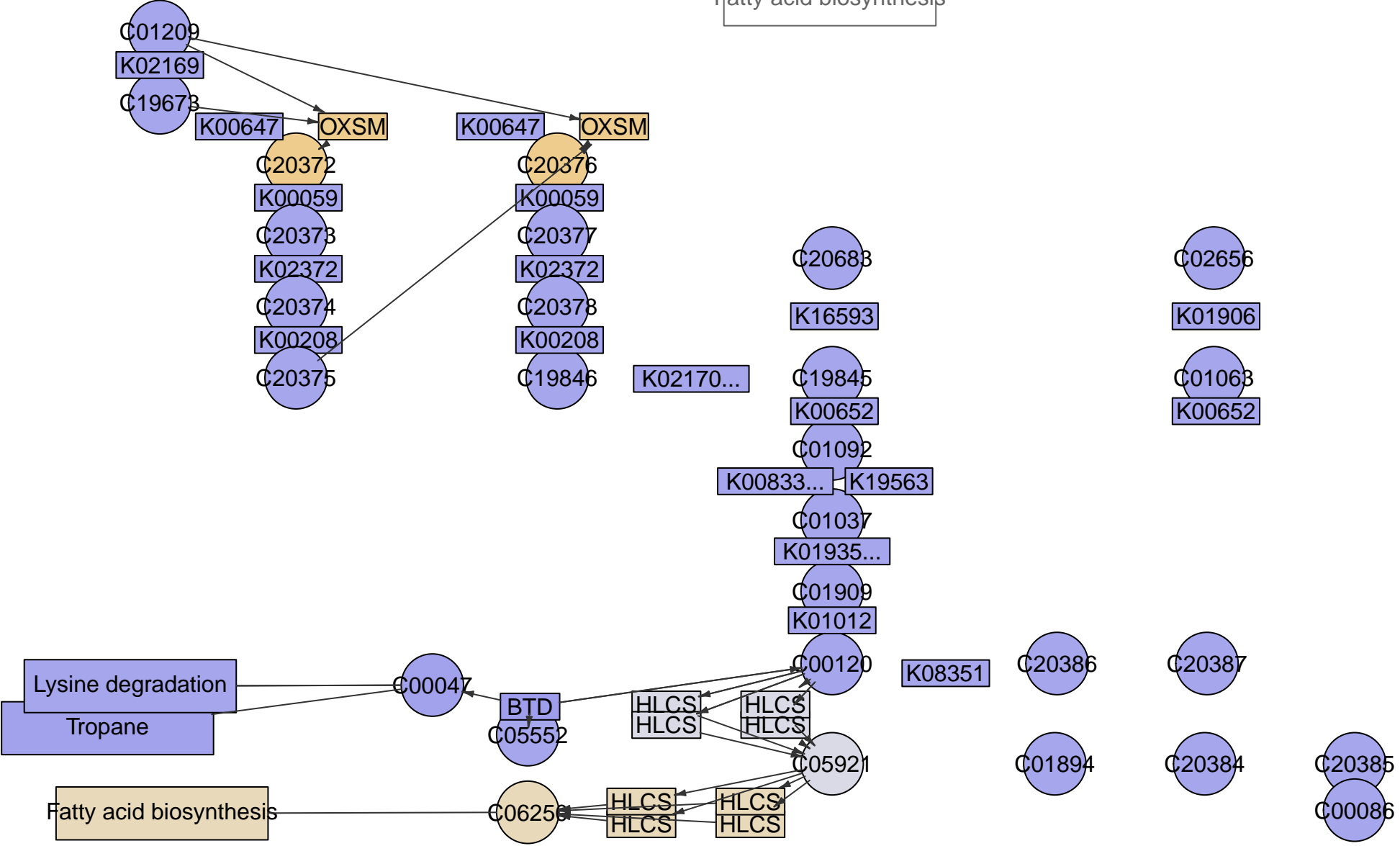
Biotin metabolism  
MPI-060

Fatty acid biosynthesis



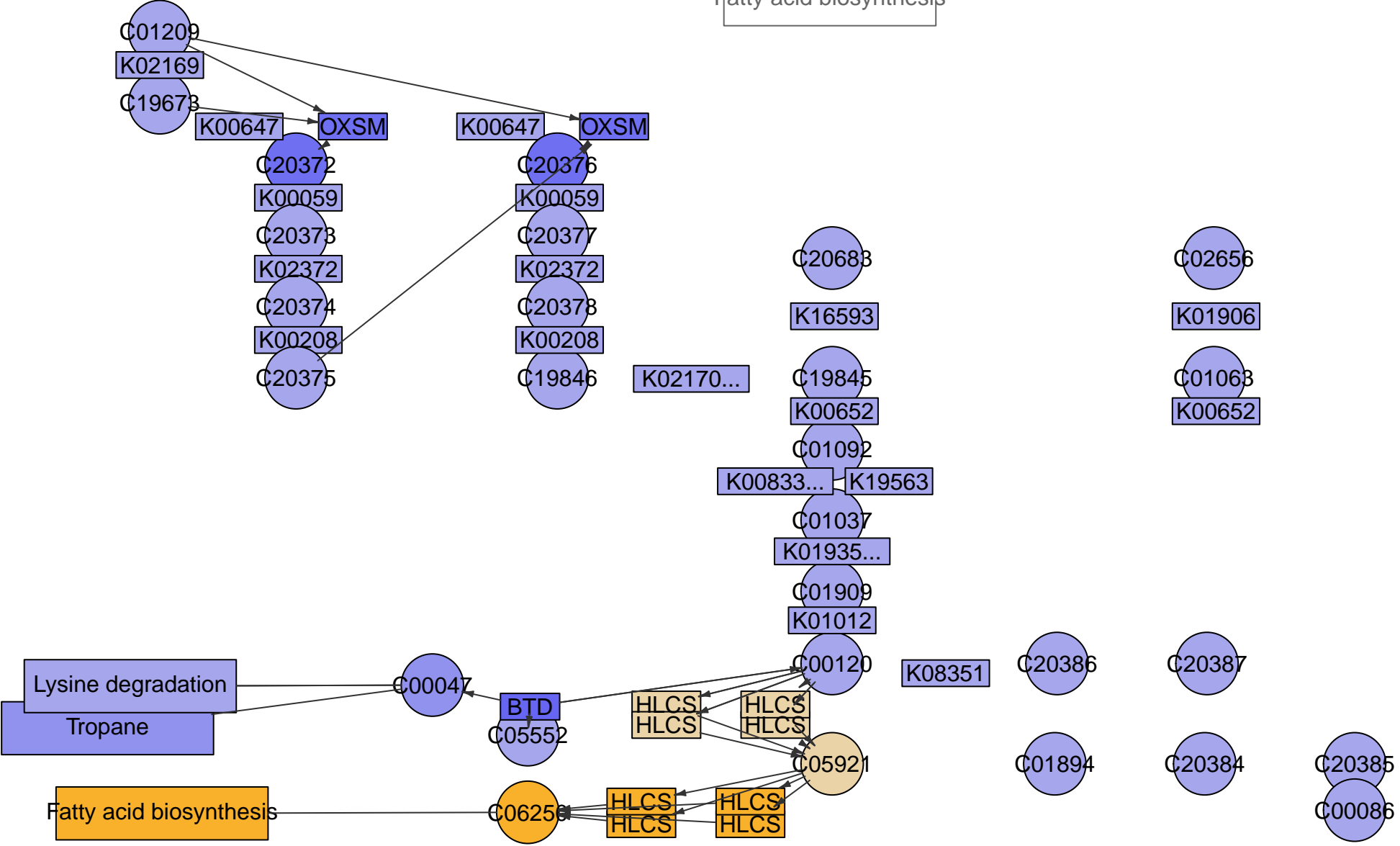
Biotin metabolism  
MPI-061

Fatty acid biosynthesis



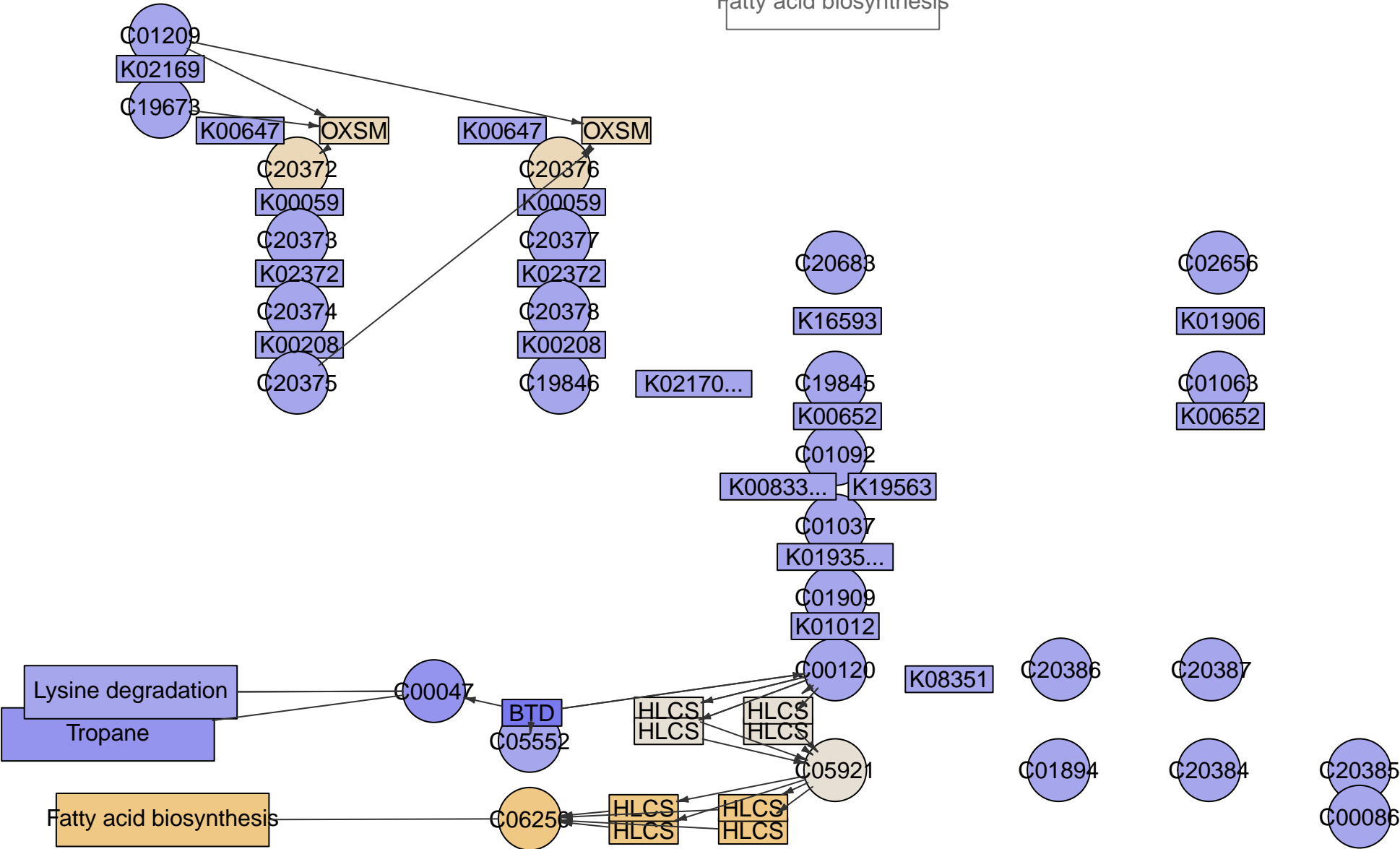
Biotin metabolism  
MPI-064

Fatty acid biosynthesis



Biotin metabolism  
MPI-070

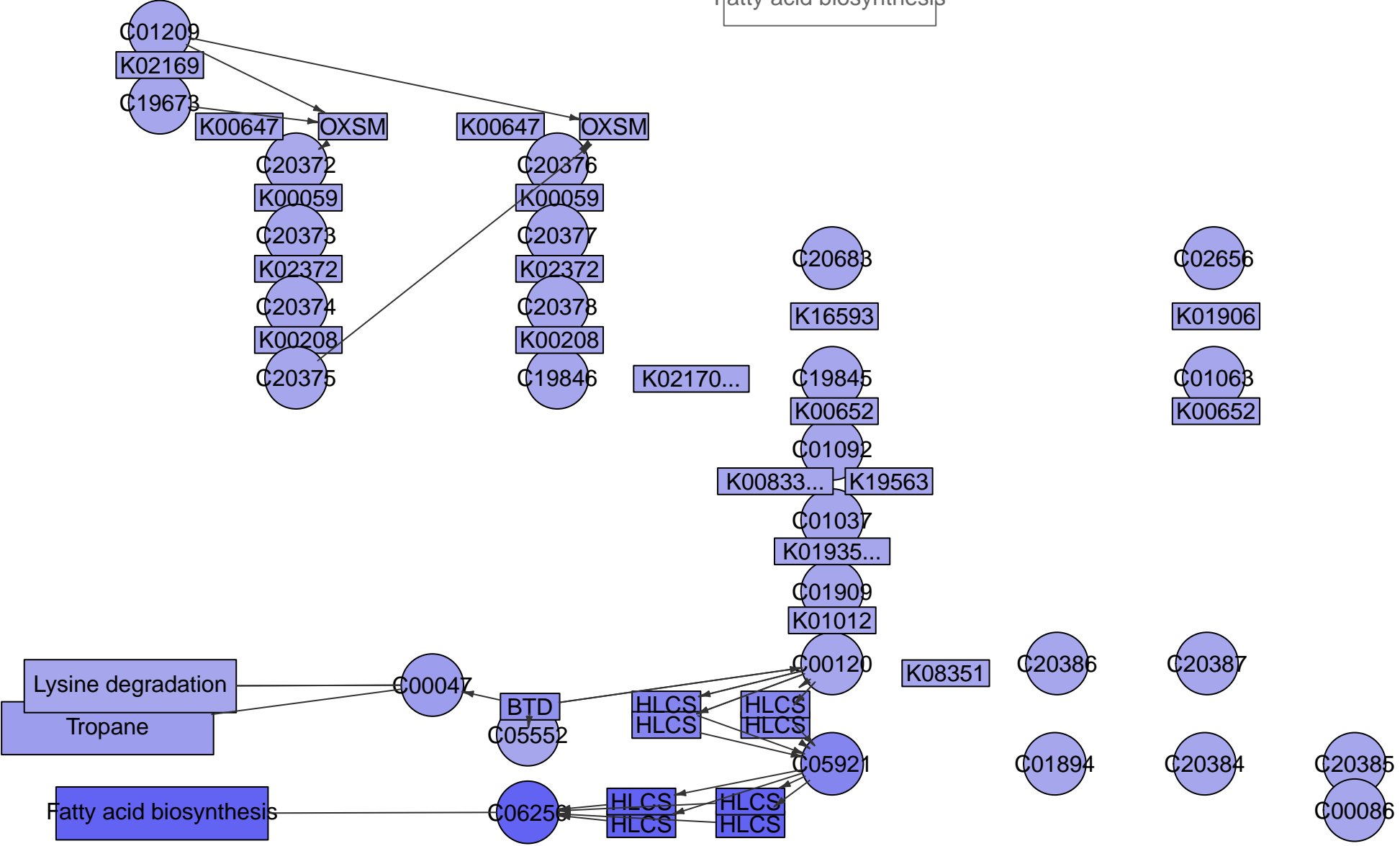
Fatty acid biosynthesis





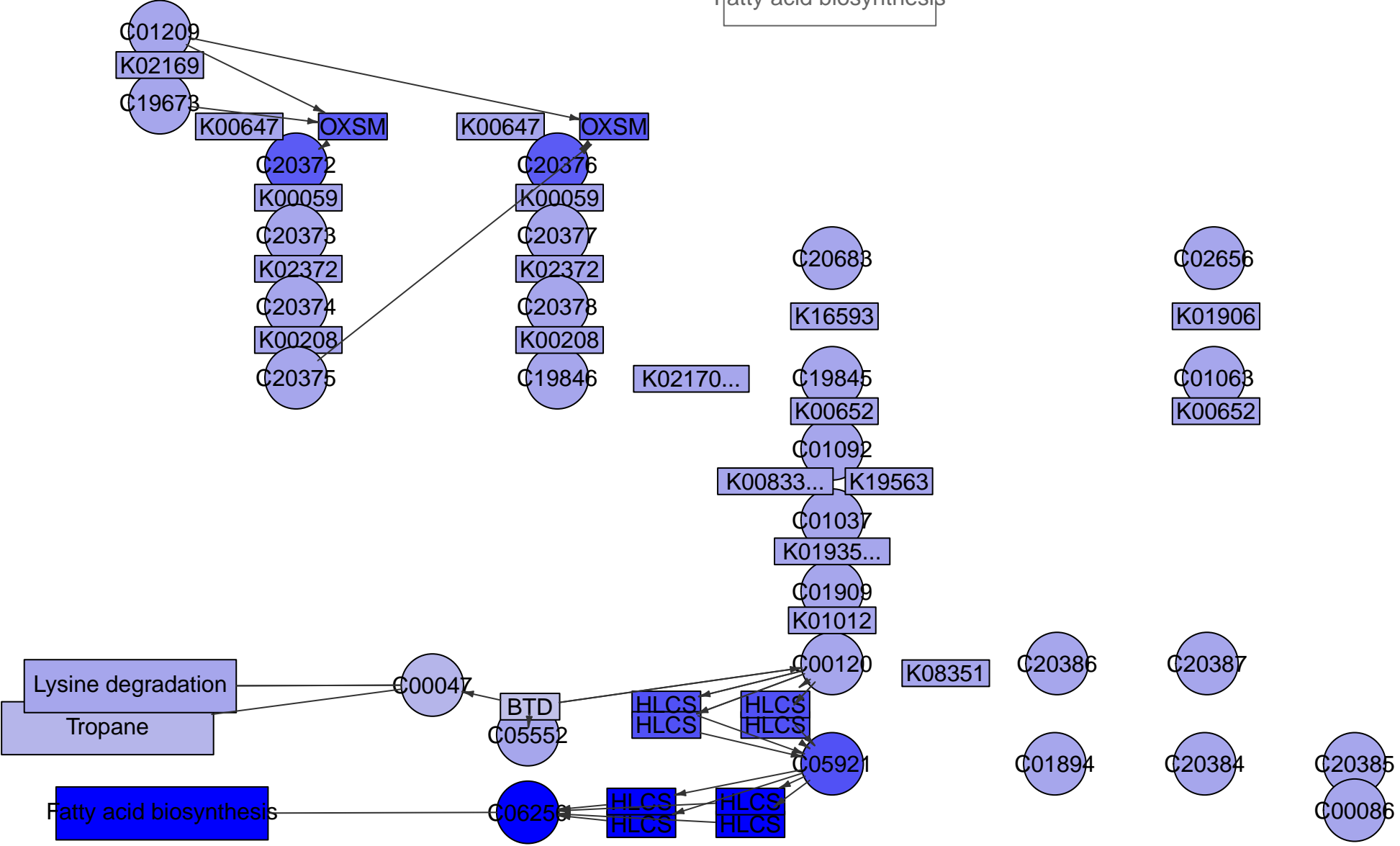
Biotin metabolism  
MPI-072

Fatty acid biosynthesis



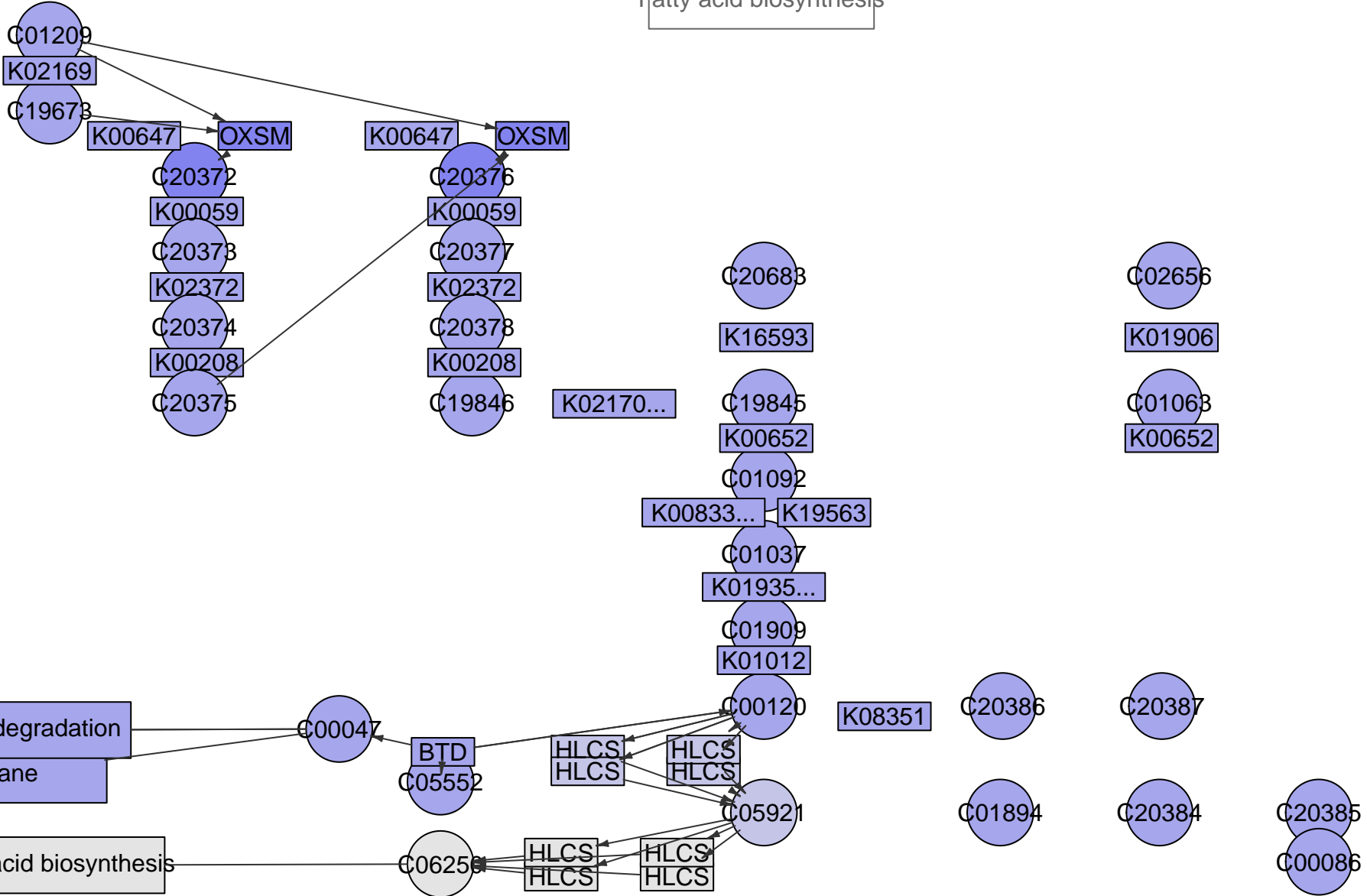
Biotin metabolism  
MPI-093

Fatty acid biosynthesis



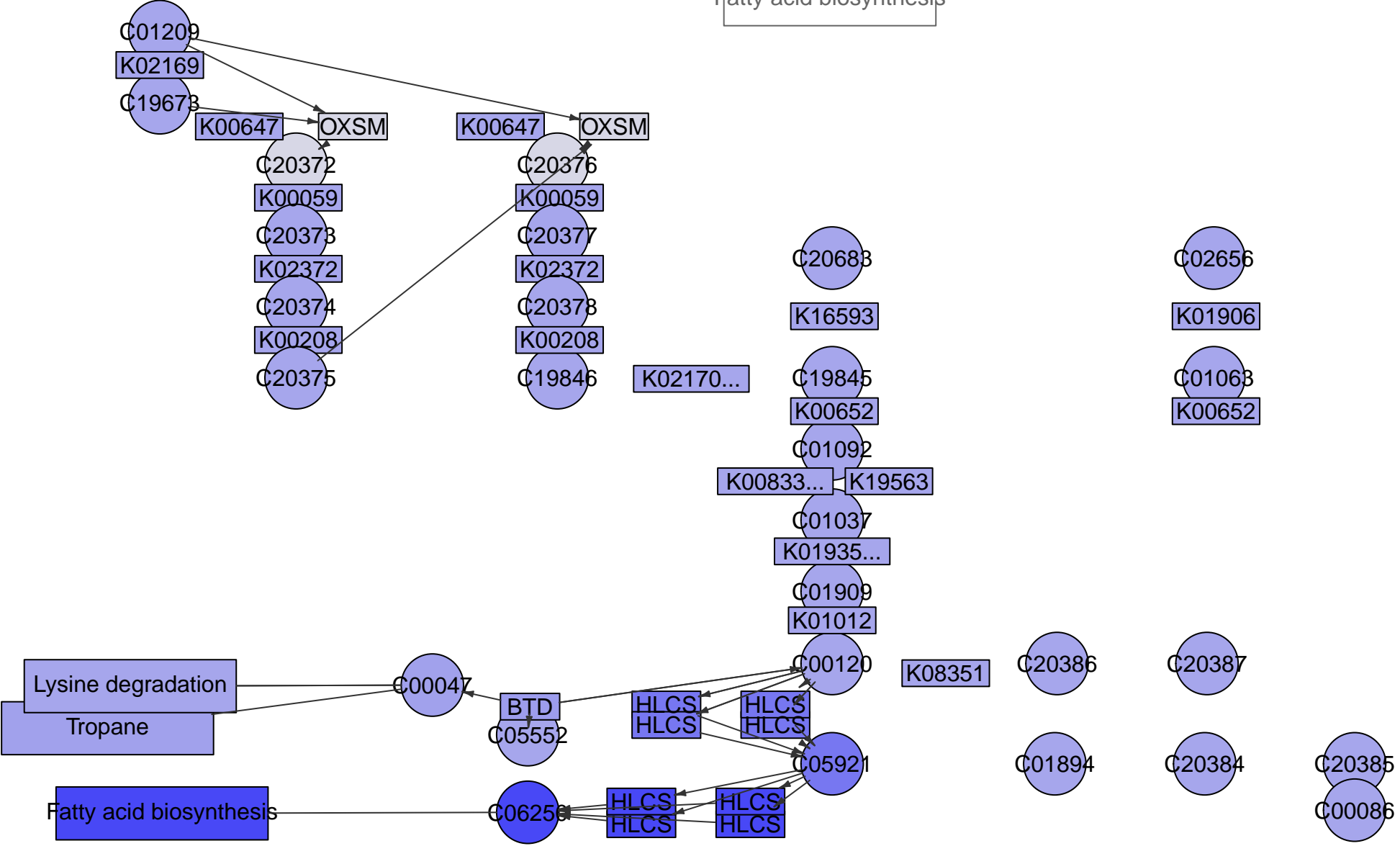
Biotin metabolism  
MPI-094

Fatty acid biosynthesis



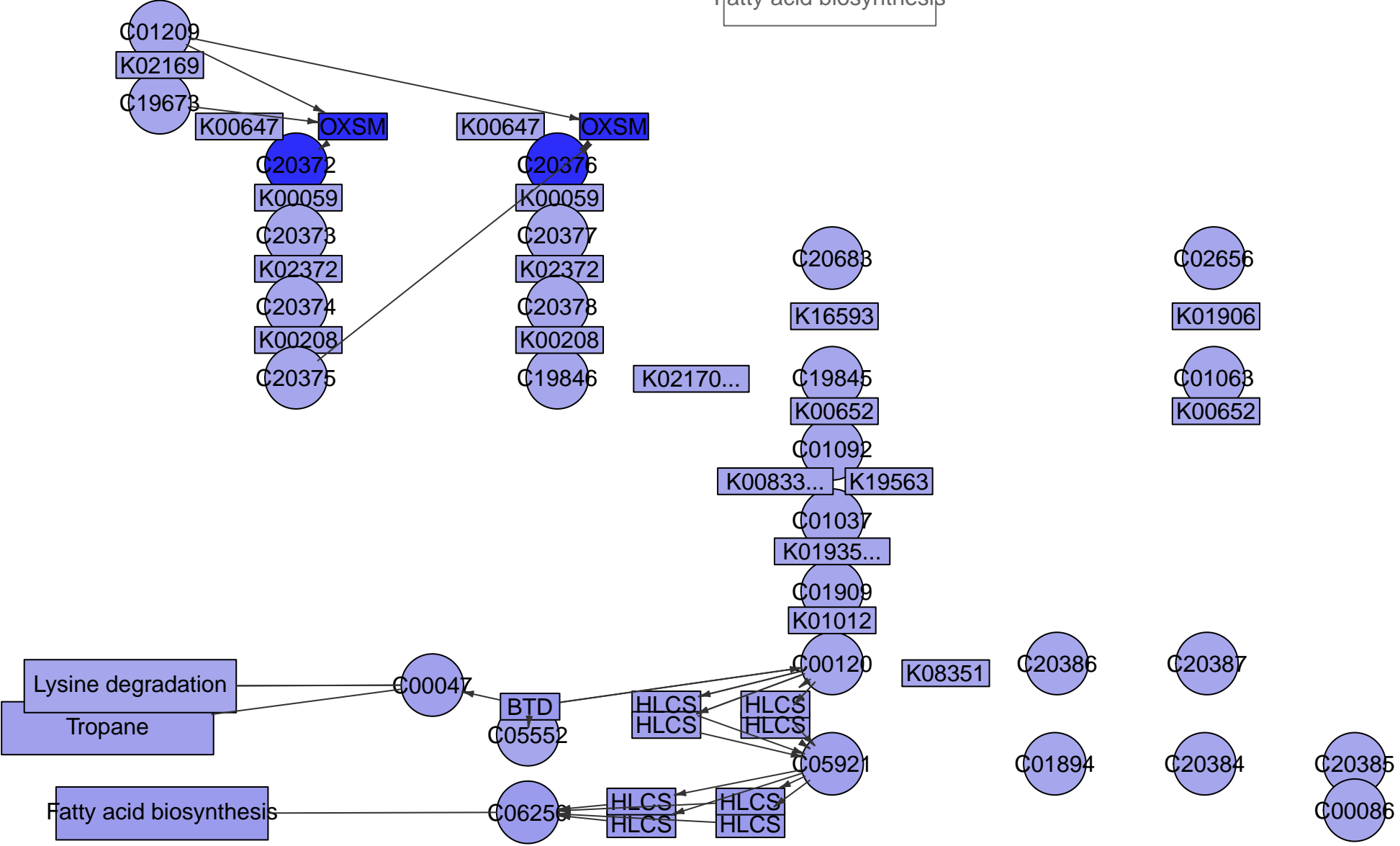
Biotin metabolism  
MPI-099

Fatty acid biosynthesis



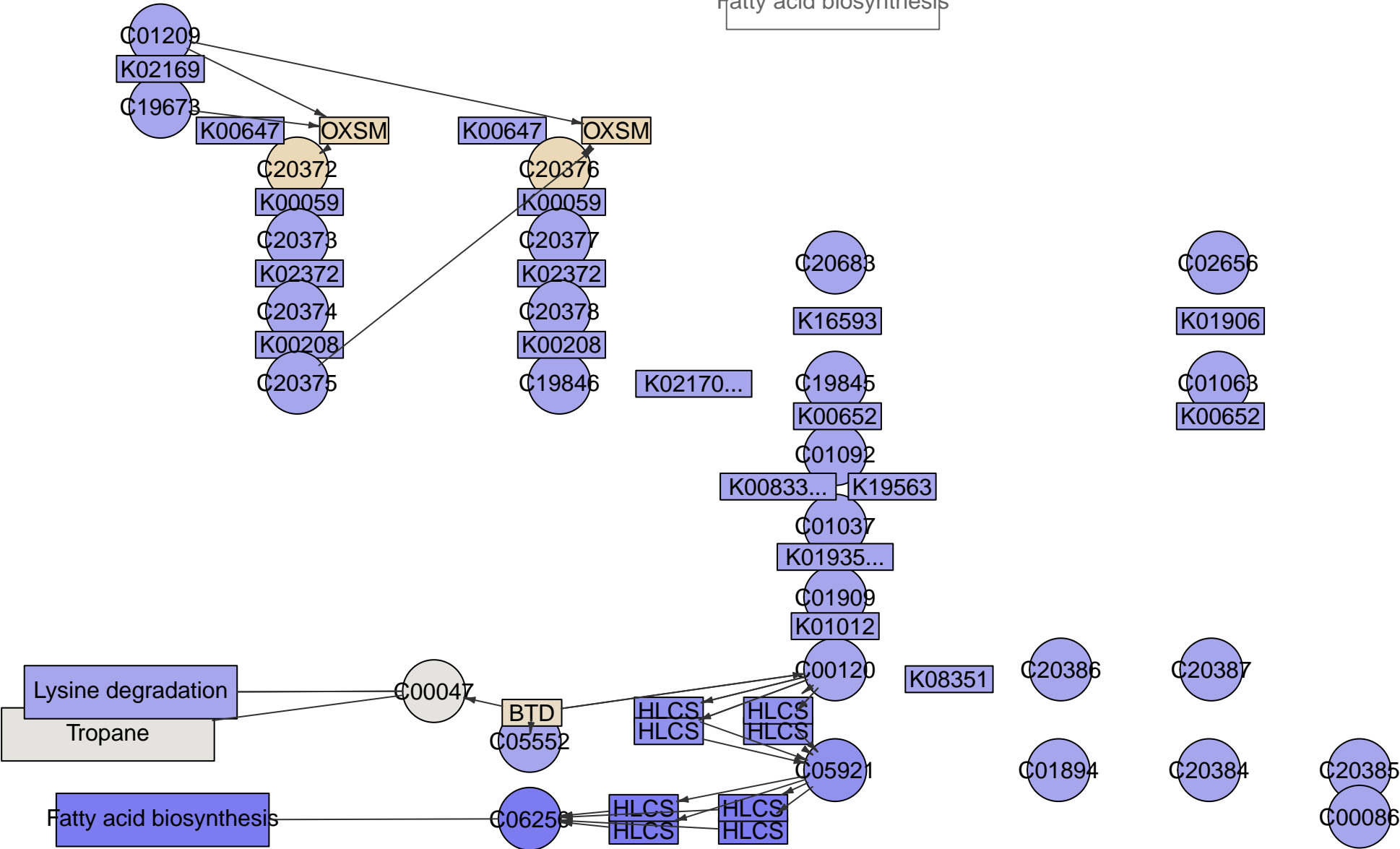
Biotin metabolism  
MPI-104

Fatty acid biosynthesis



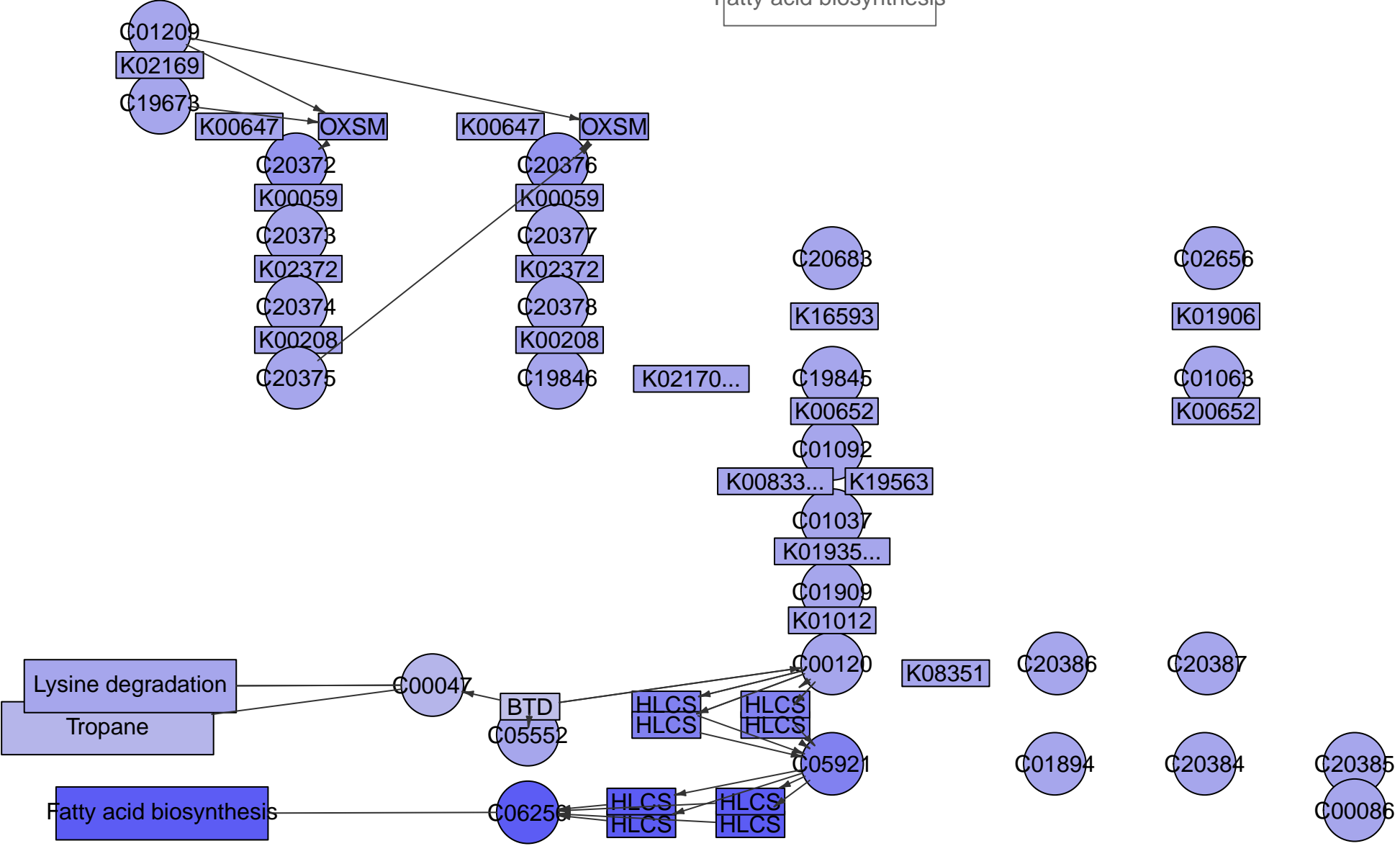
Biotin metabolism  
MPI-107

Fatty acid biosynthesis



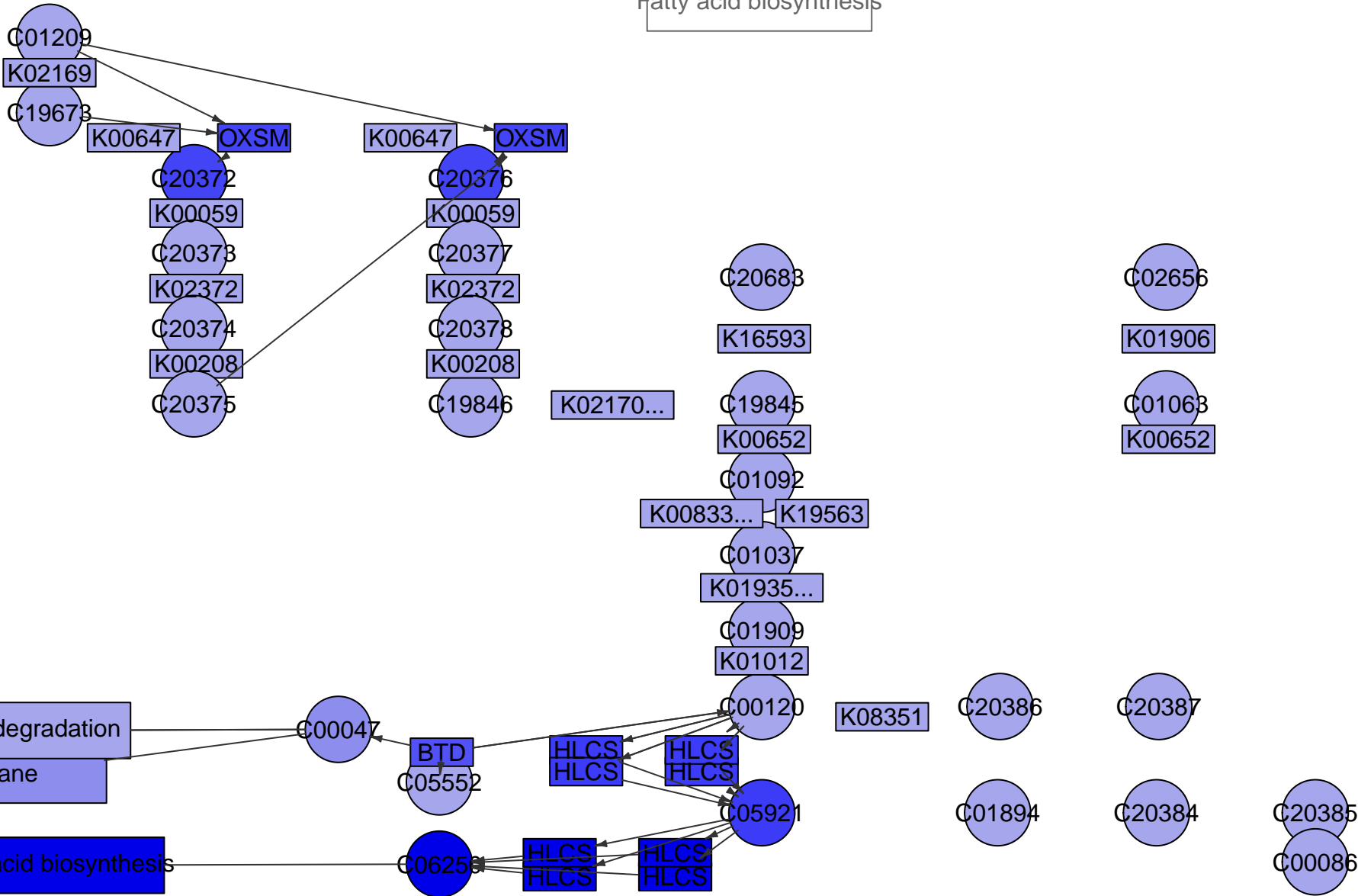
Biotin metabolism  
MPI-112

Fatty acid biosynthesis



Biotin metabolism  
MPI-116

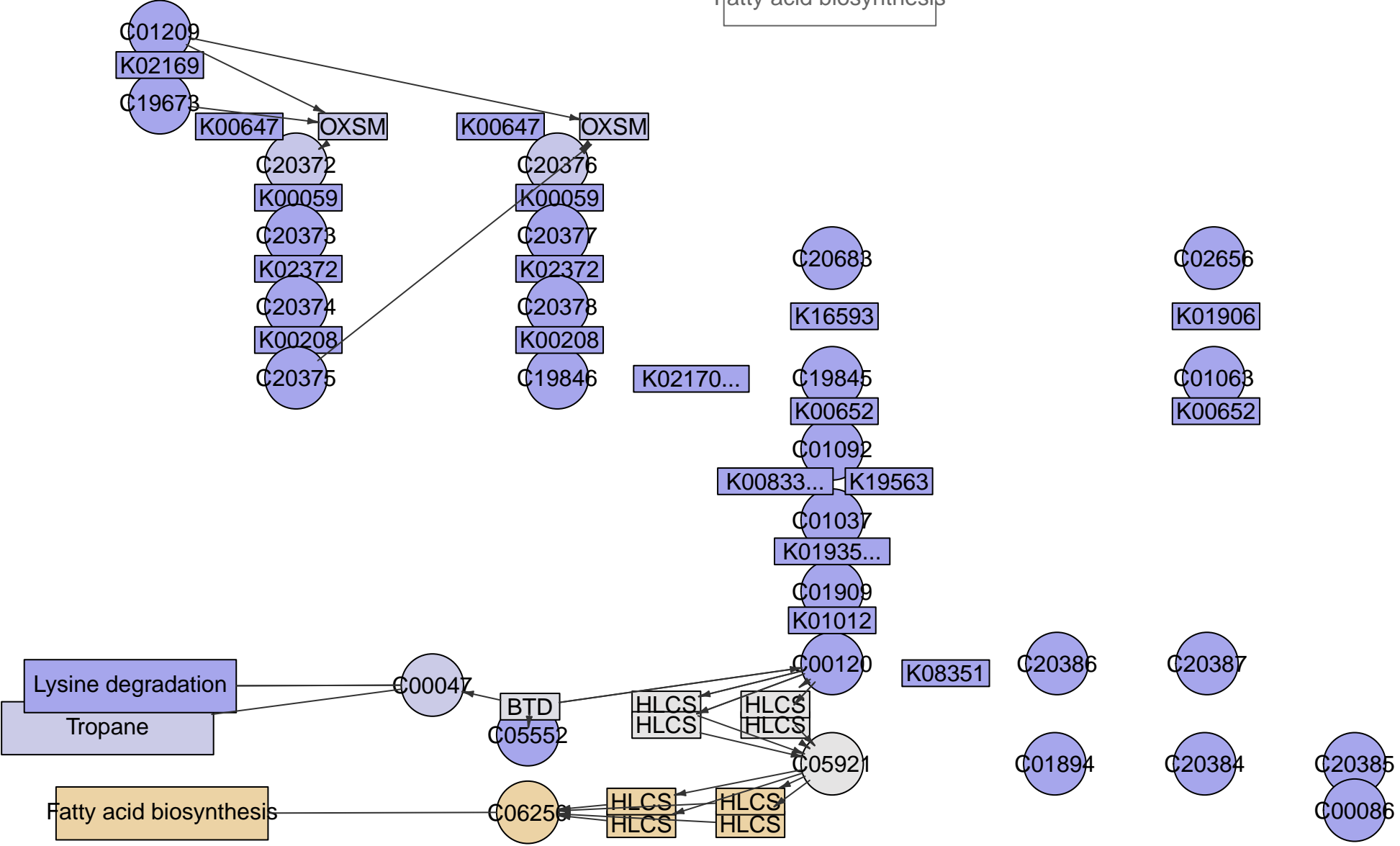
Fatty acid biosynthesis





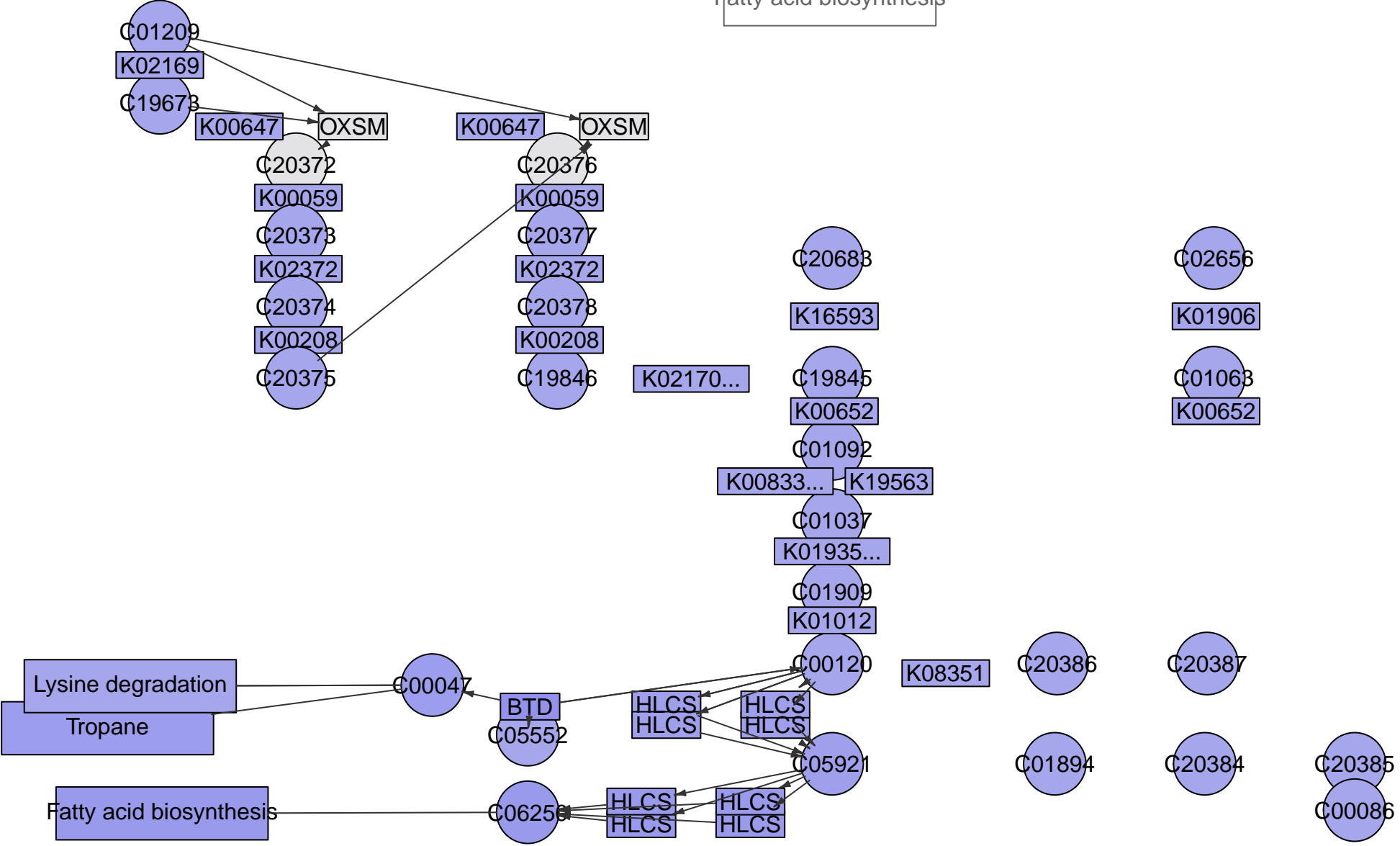
Biotin metabolism  
MPI-117

Fatty acid biosynthesis



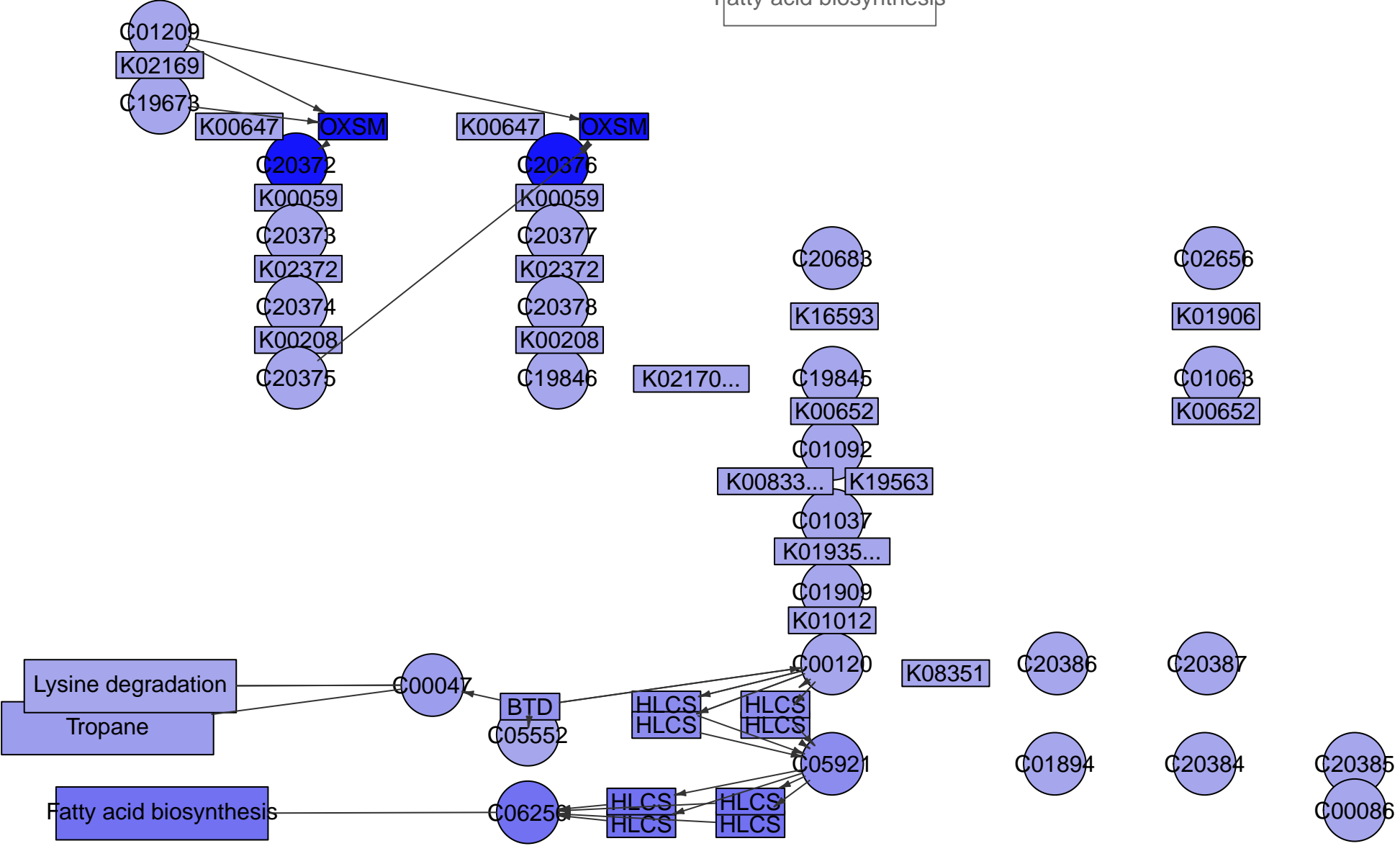
Biotin metabolism  
MPI-120

Fatty acid biosynthesis



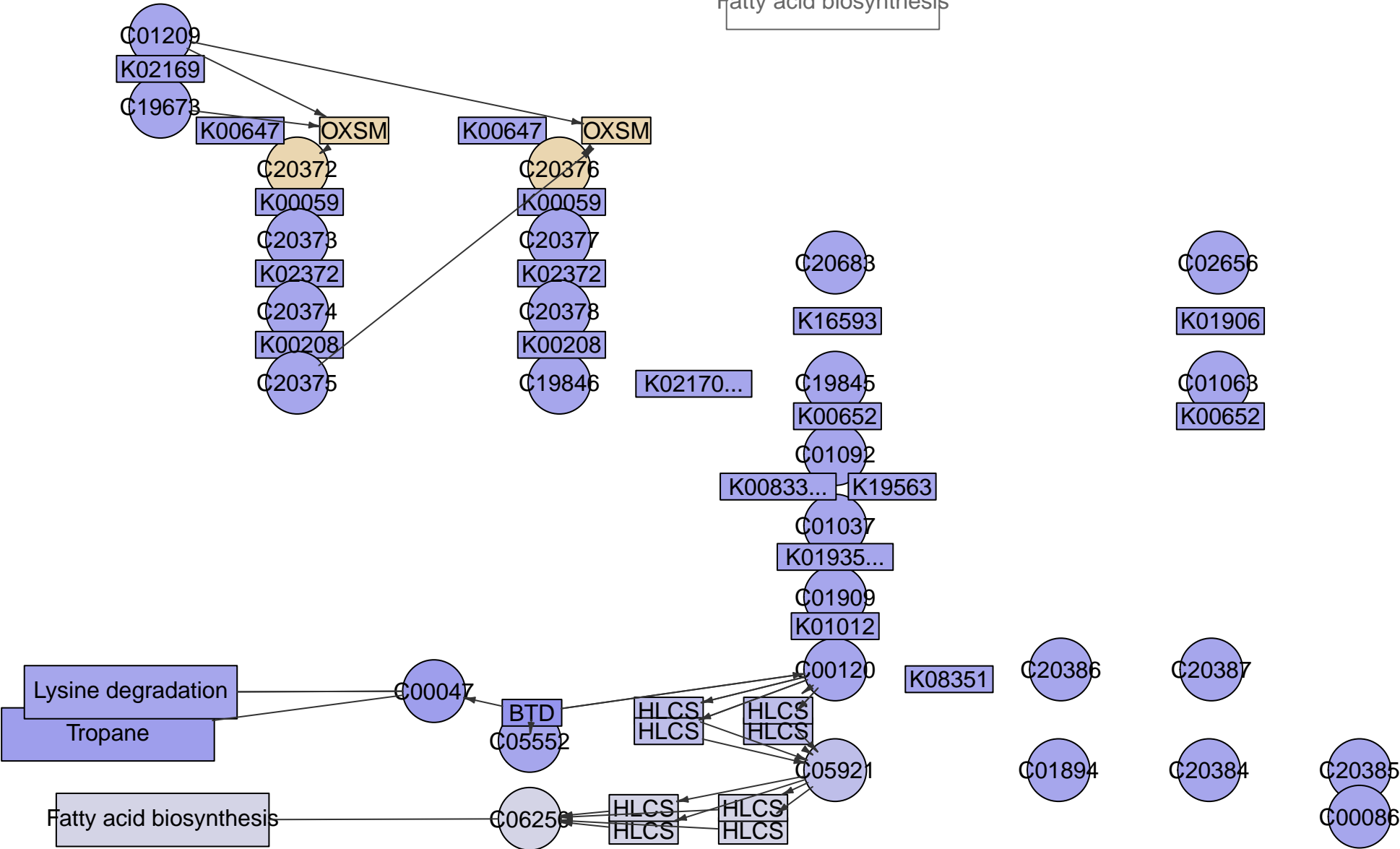
Biotin metabolism  
MPI-121

Fatty acid biosynthesis



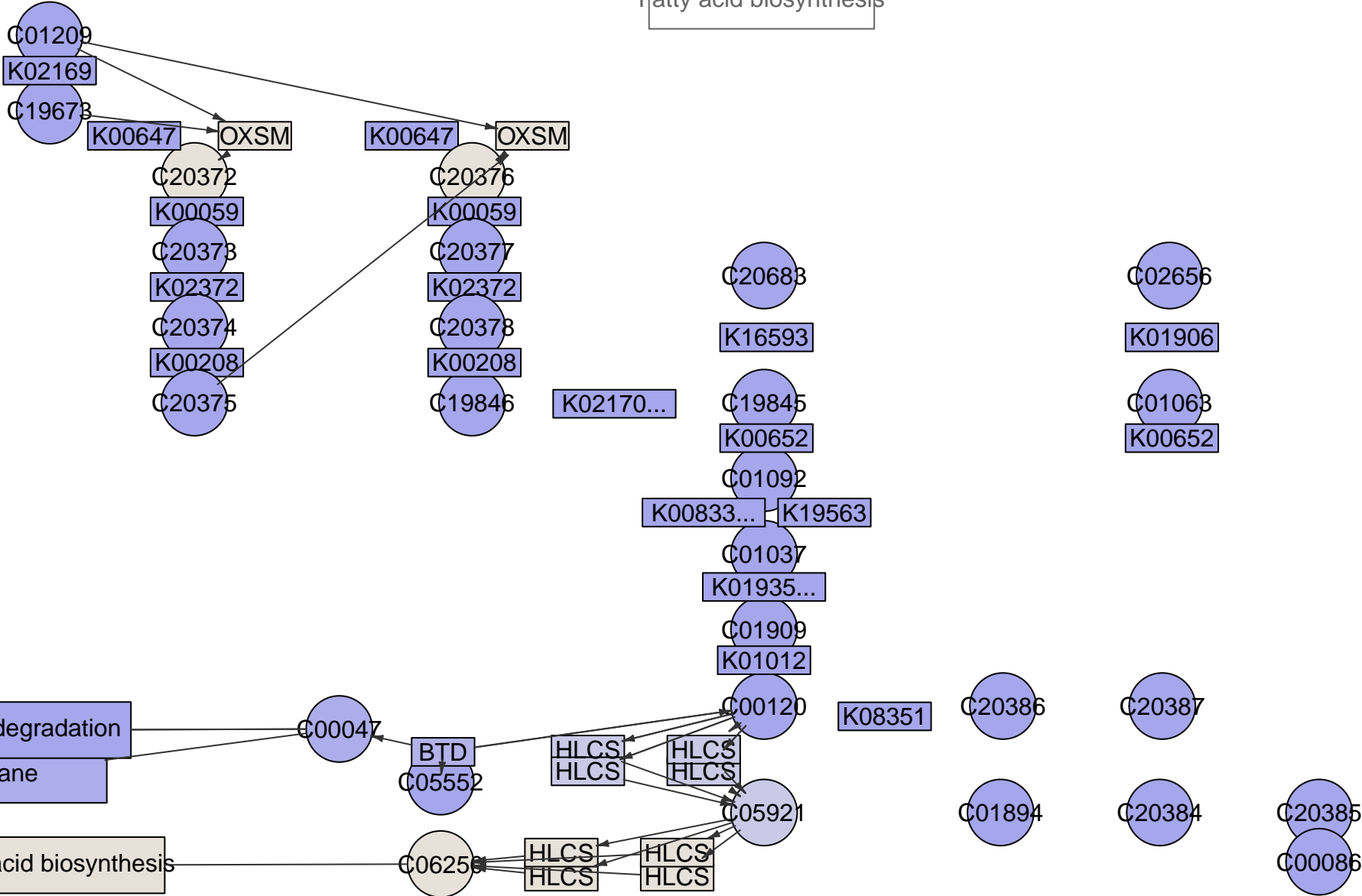
Biotin metabolism  
MPI-124

Fatty acid biosynthesis



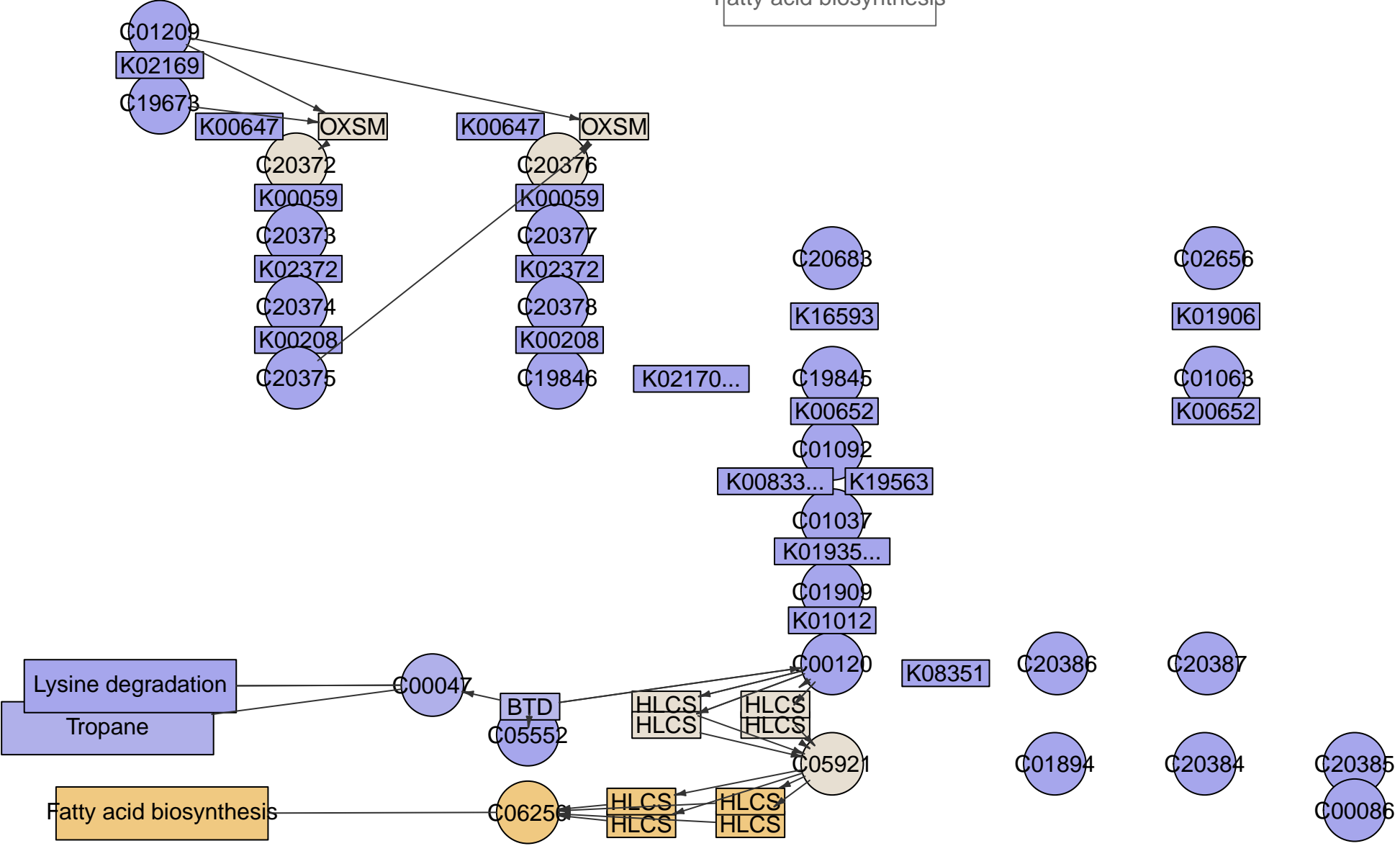
Biotin metabolism  
MPI-126

Fatty acid biosynthesis



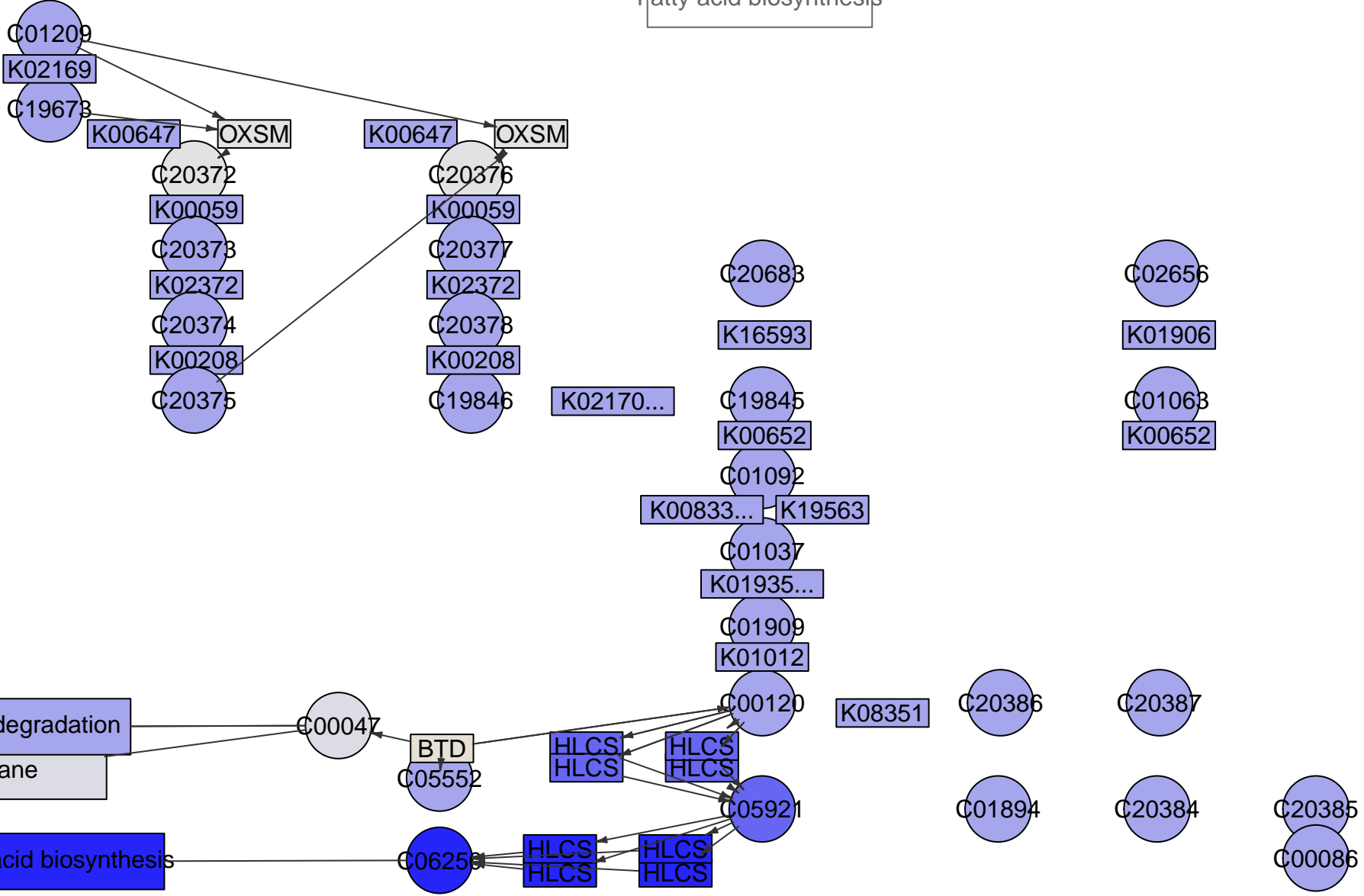
Biotin metabolism  
MPI-131

Fatty acid biosynthesis



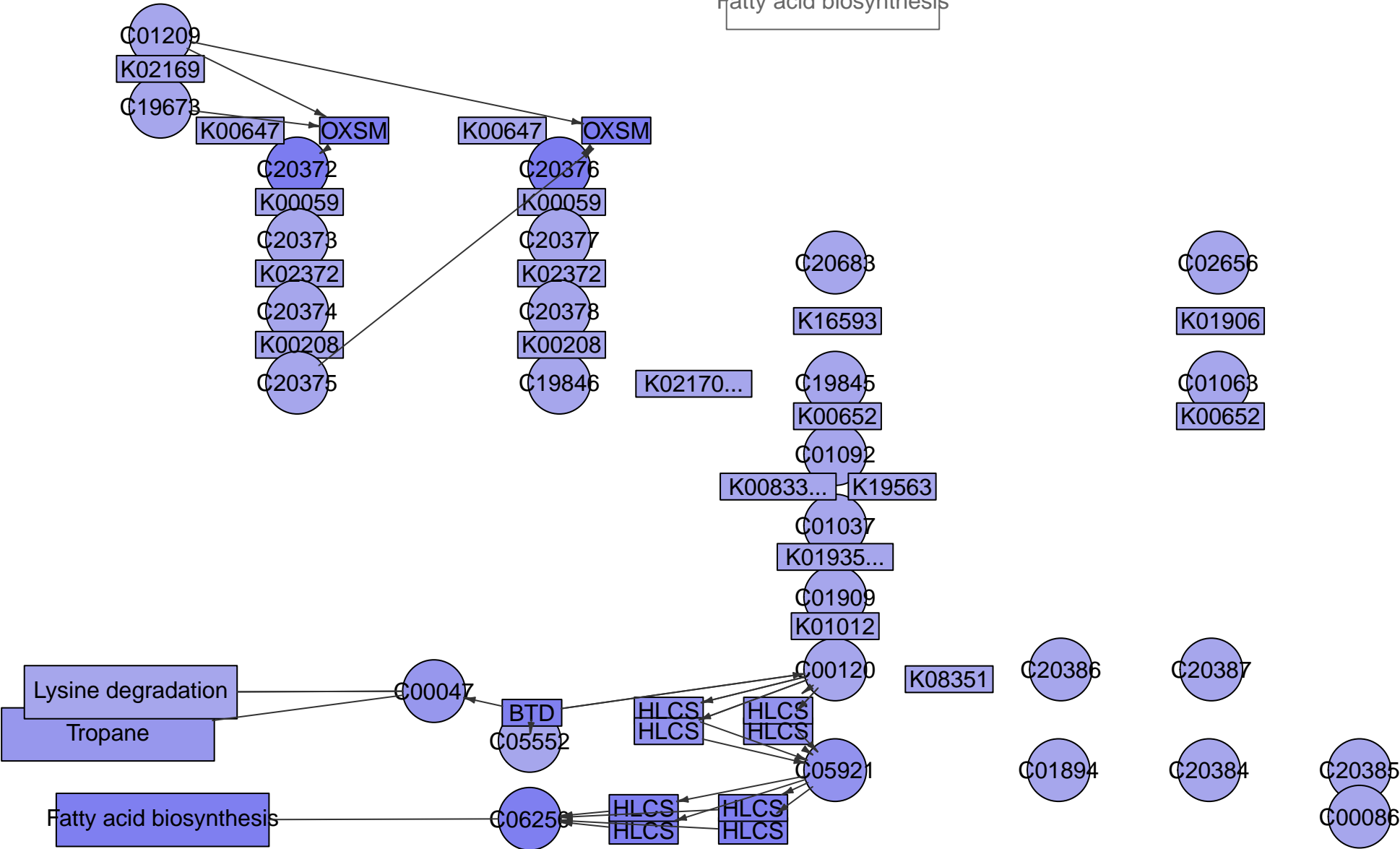
Biotin metabolism  
MPI-143

Fatty acid biosynthesis



Biotin metabolism  
MPI-148

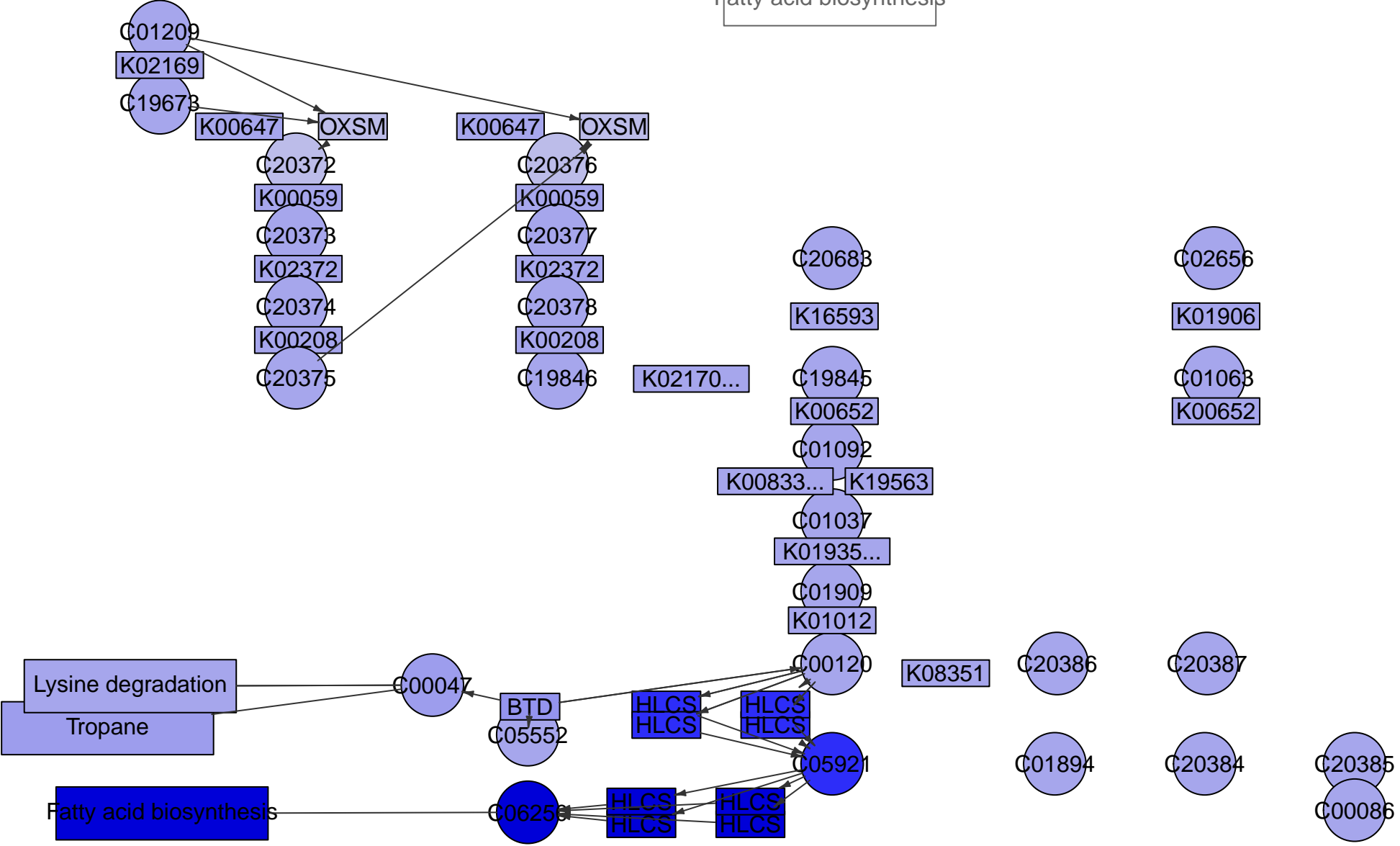
Fatty acid biosynthesis





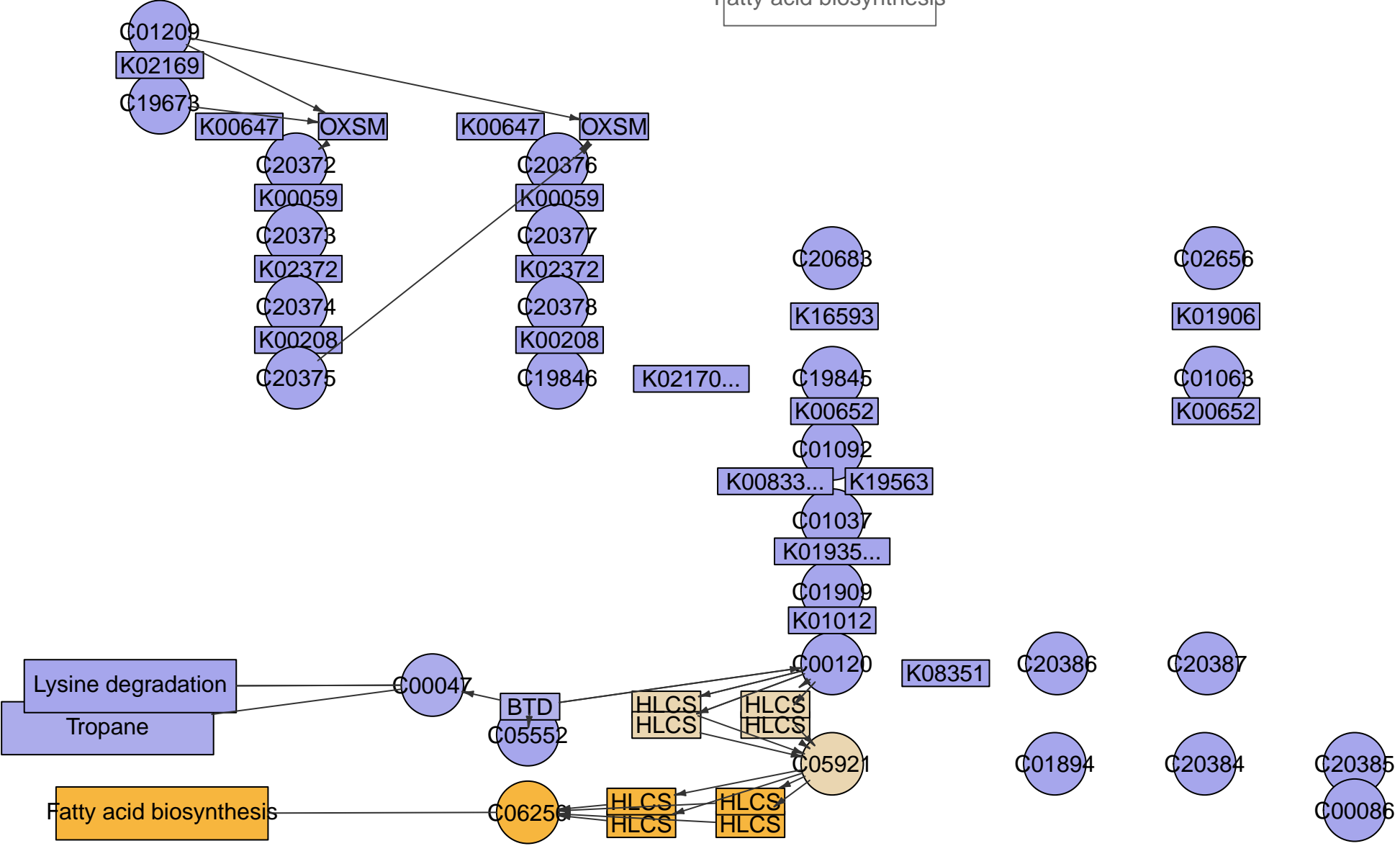
Biotin metabolism  
MPI-161

Fatty acid biosynthesis



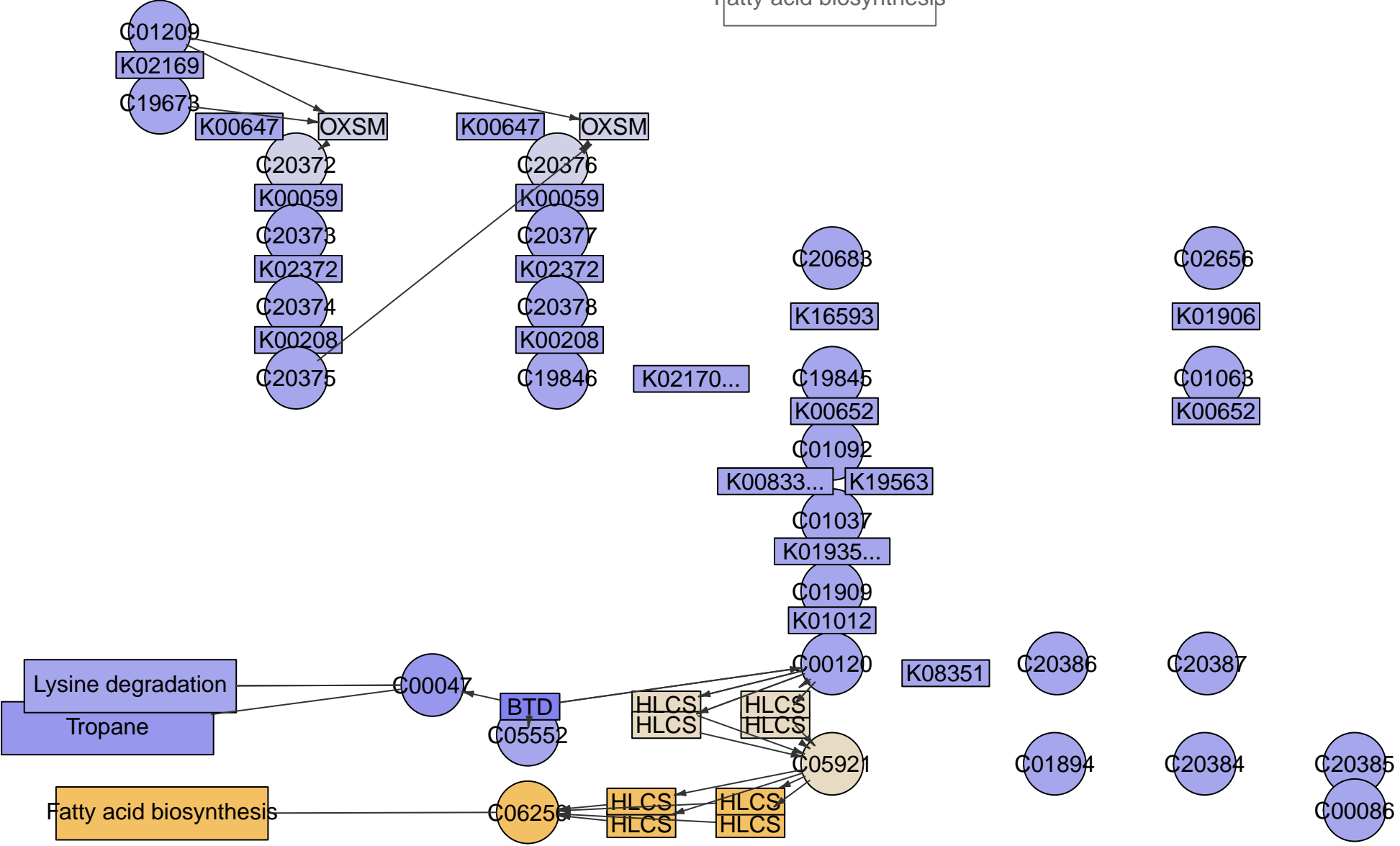
Biotin metabolism  
MPI-162

Fatty acid biosynthesis



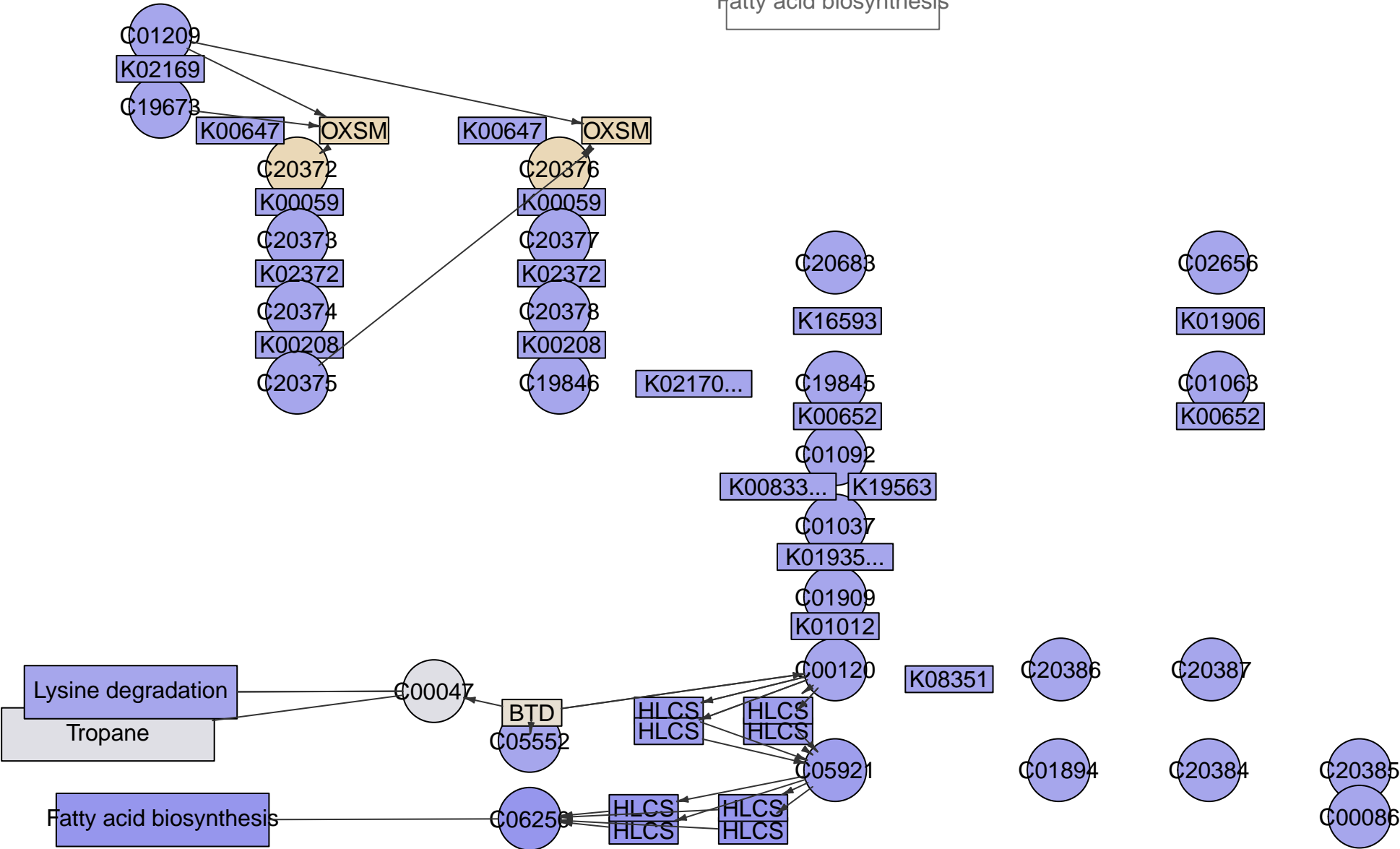
Biotin metabolism  
MPI-165

Fatty acid biosynthesis



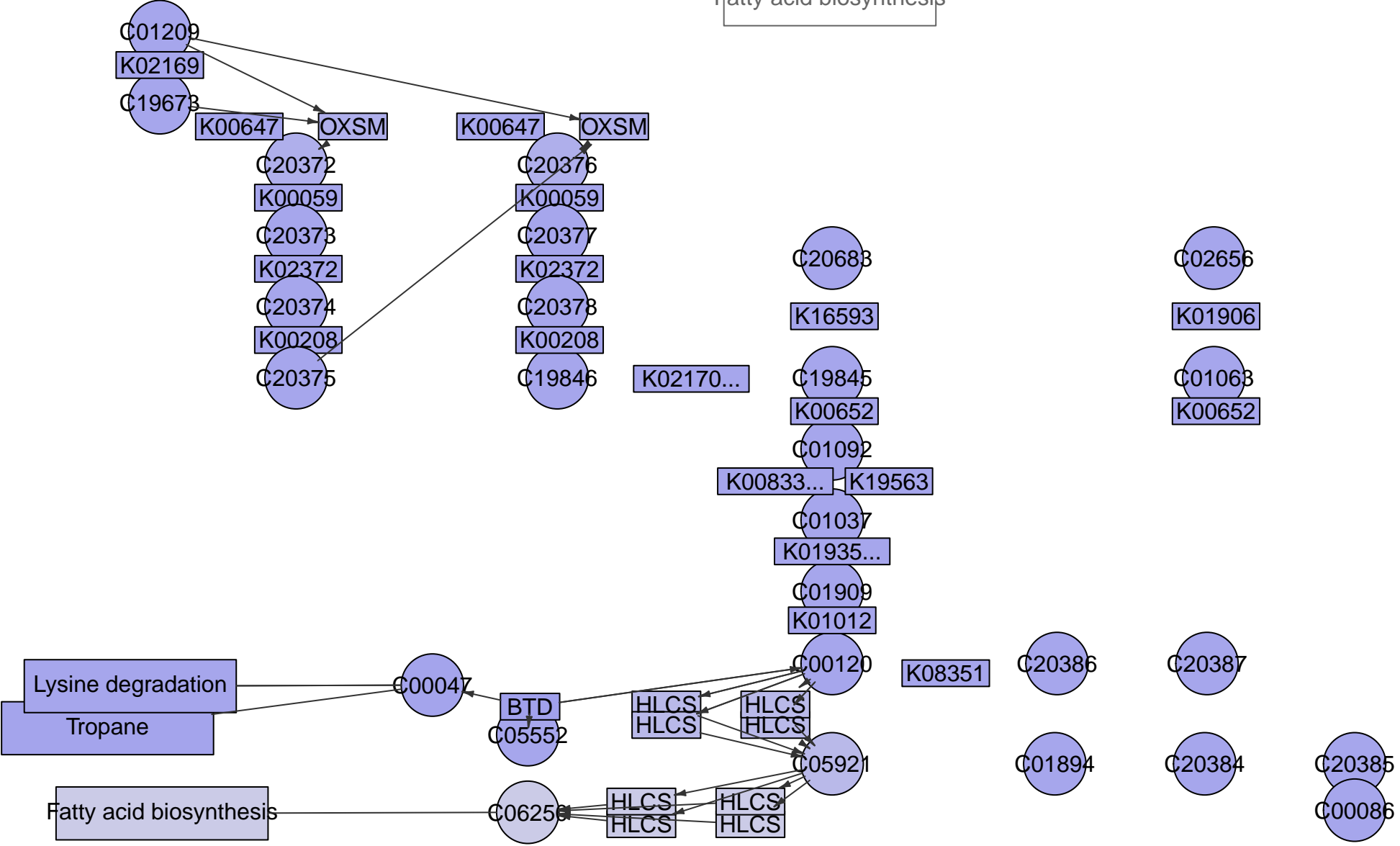
Biotin metabolism  
MPI-169

Fatty acid biosynthesis



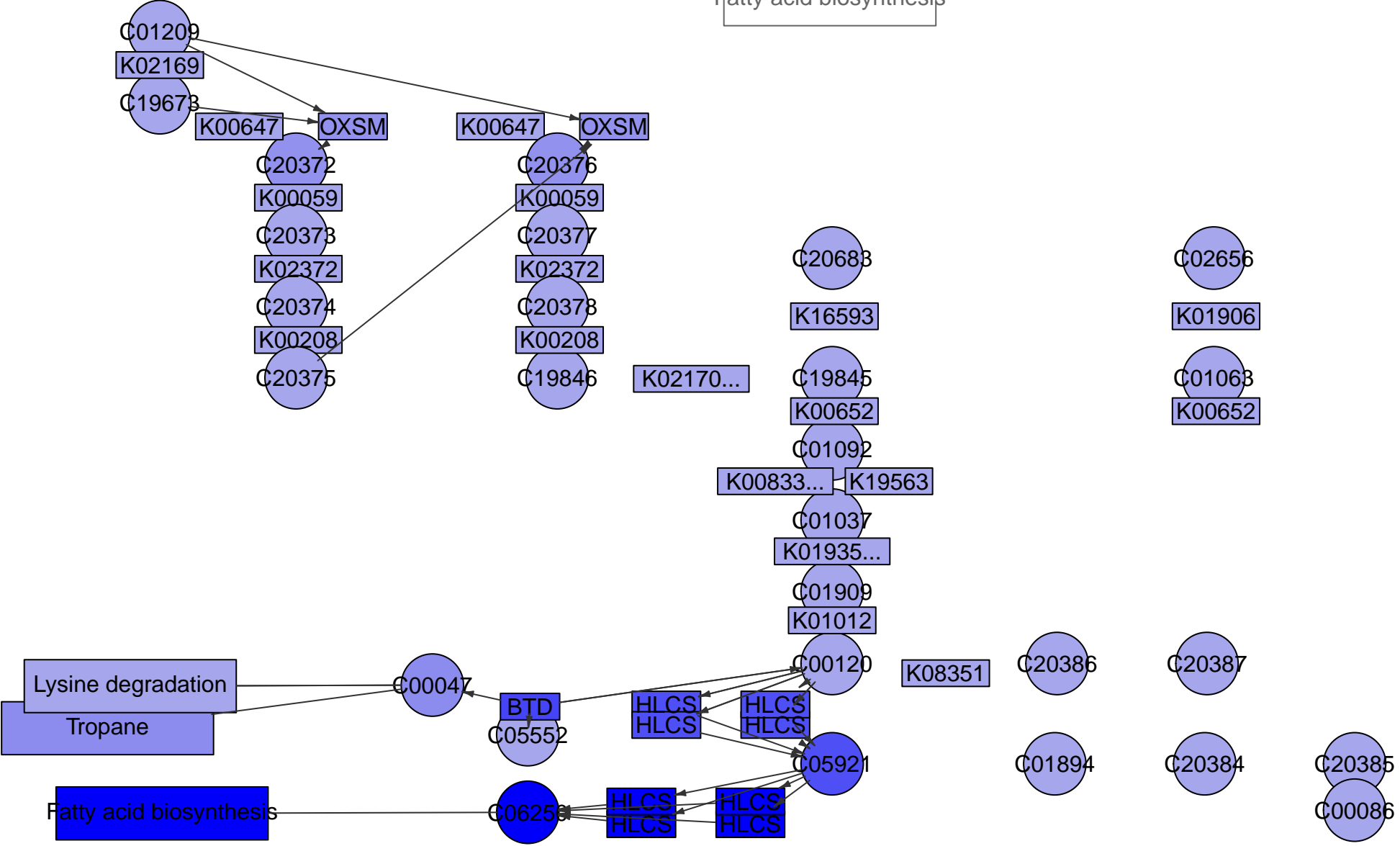
Biotin metabolism  
MPI-175

Fatty acid biosynthesis



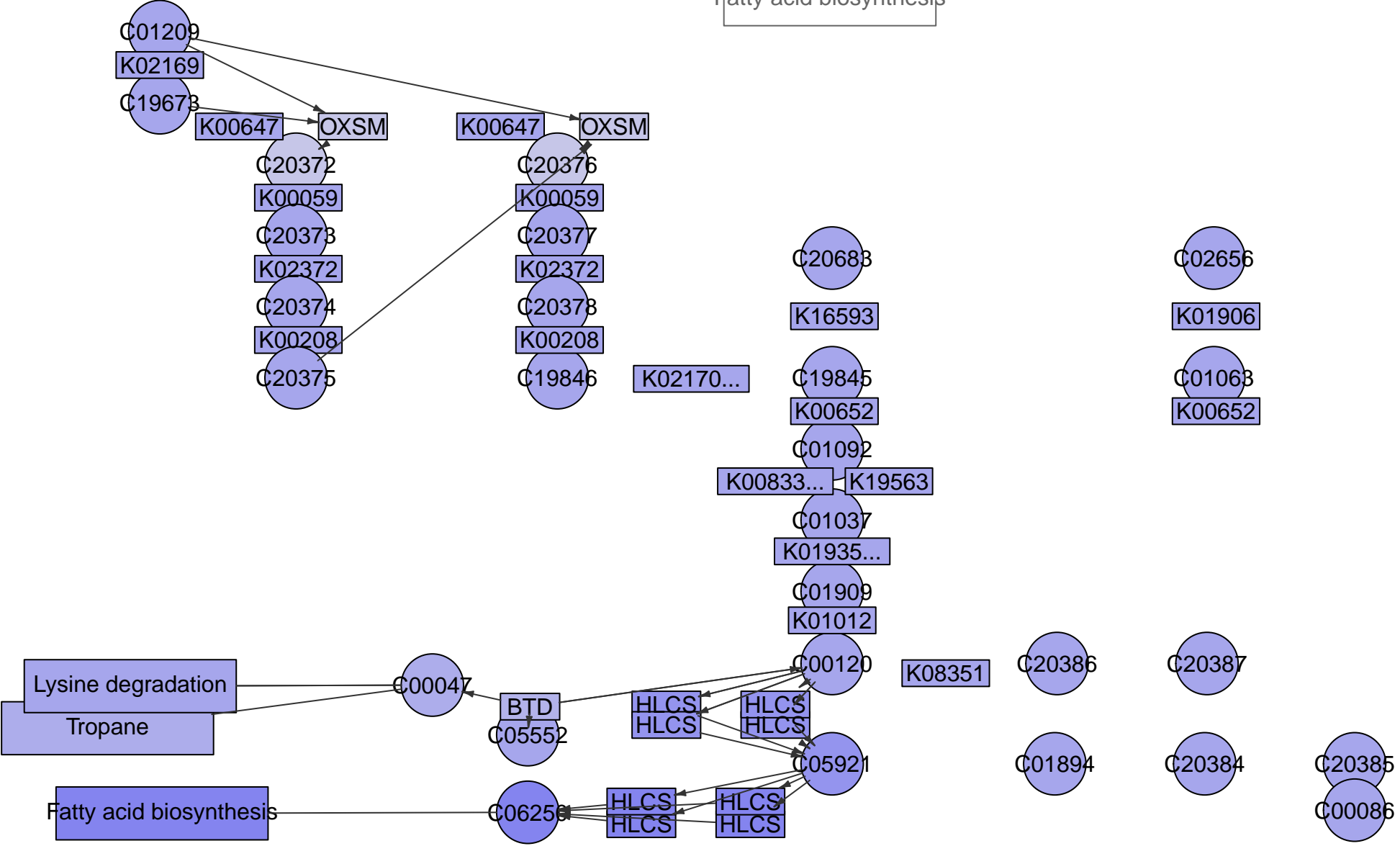
Biotin metabolism  
MPI-187

Fatty acid biosynthesis



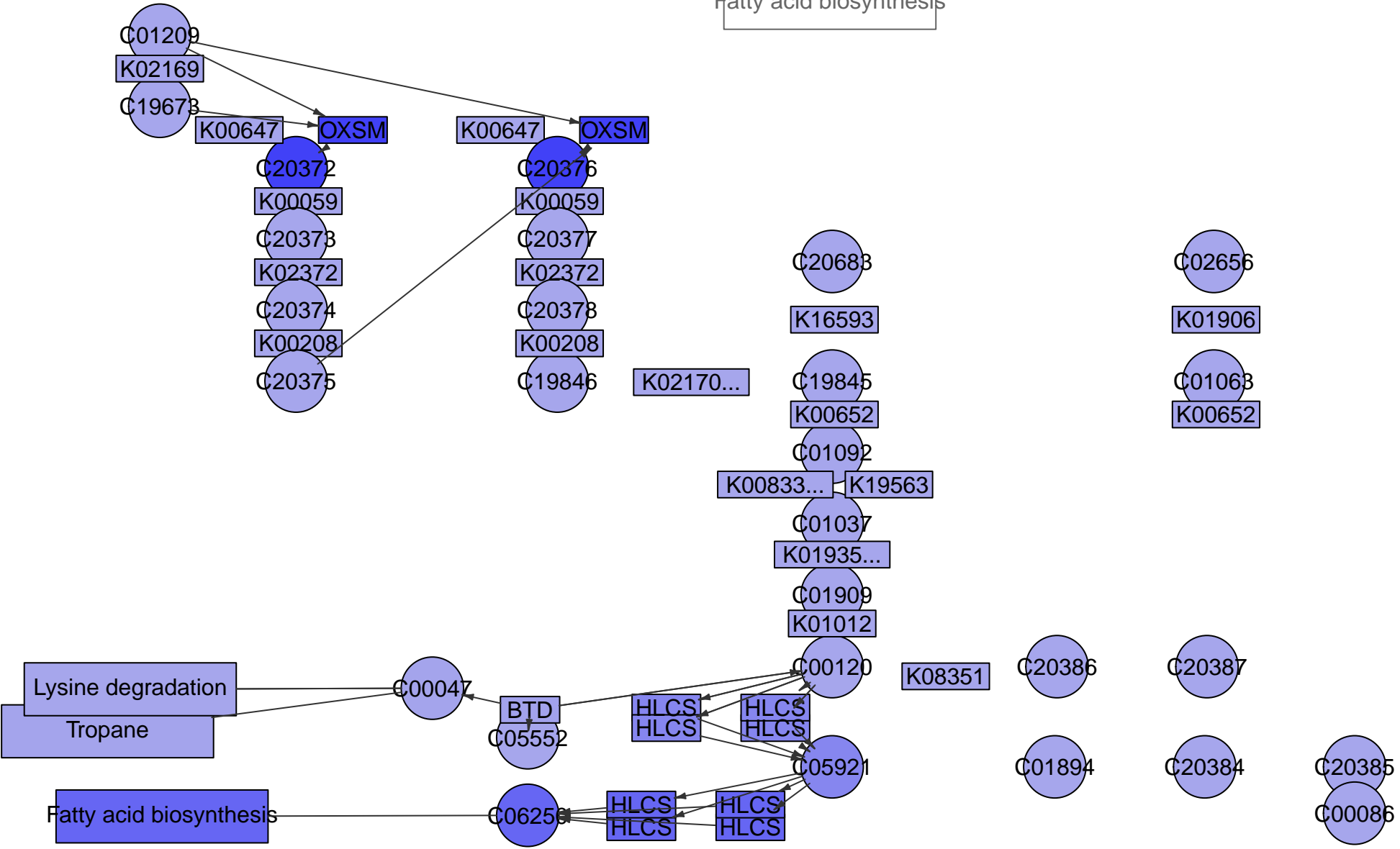
Biotin metabolism  
MPI-193

Fatty acid biosynthesis



Biotin metabolism  
MPI-216

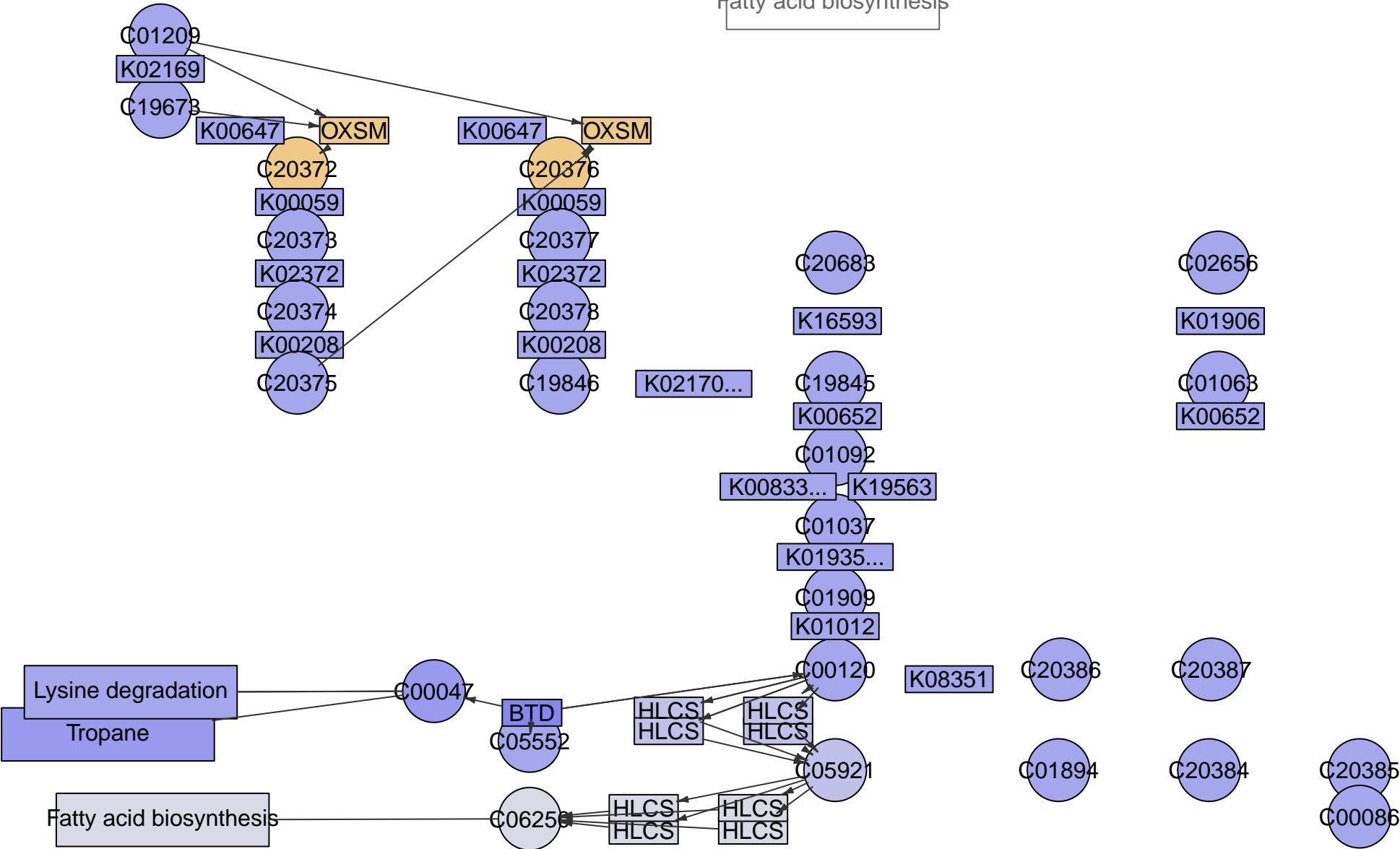
Fatty acid biosynthesis





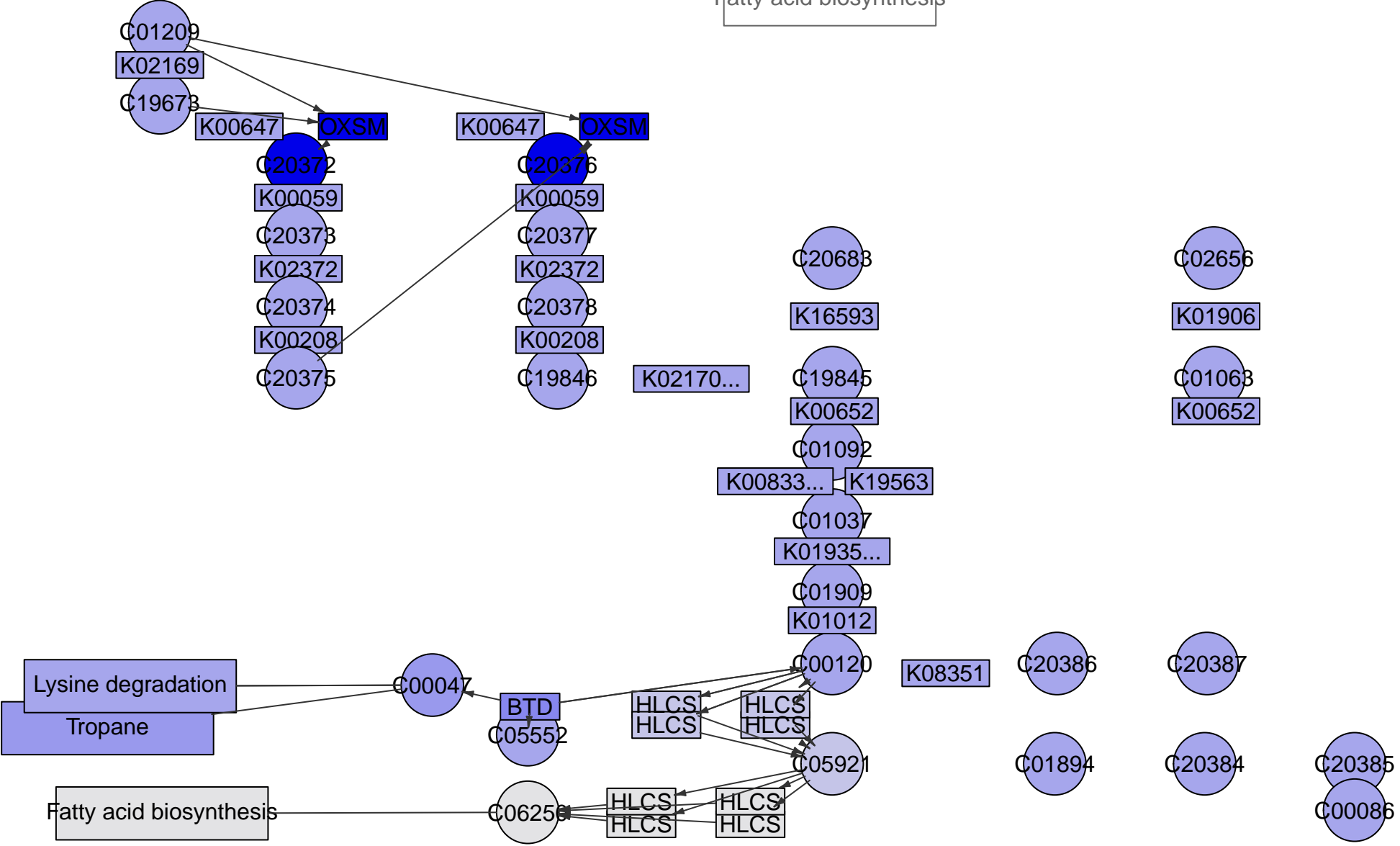
Biotin metabolism  
MPI-222

Fatty acid biosynthesis



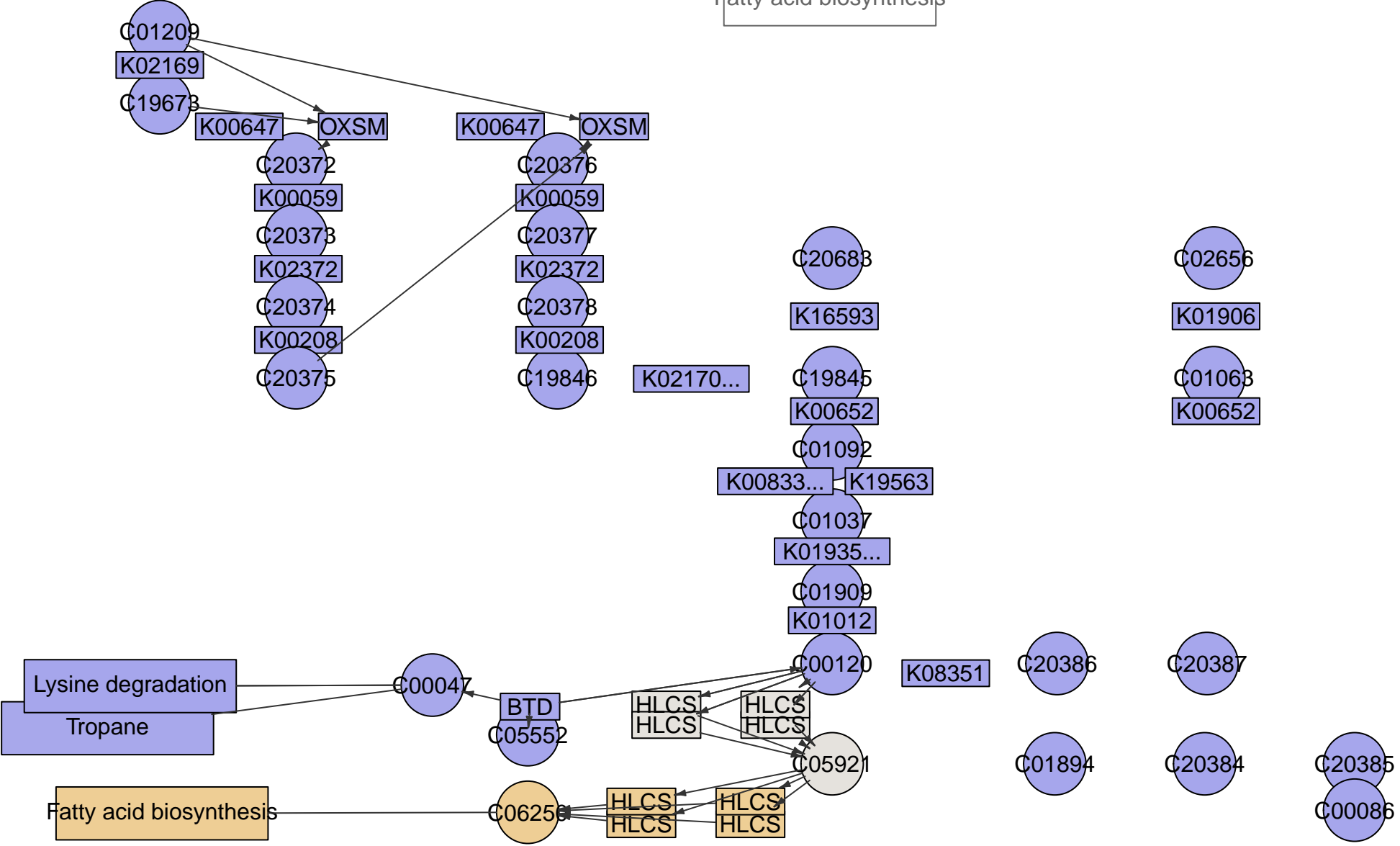
Biotin metabolism  
MPI-225

Fatty acid biosynthesis



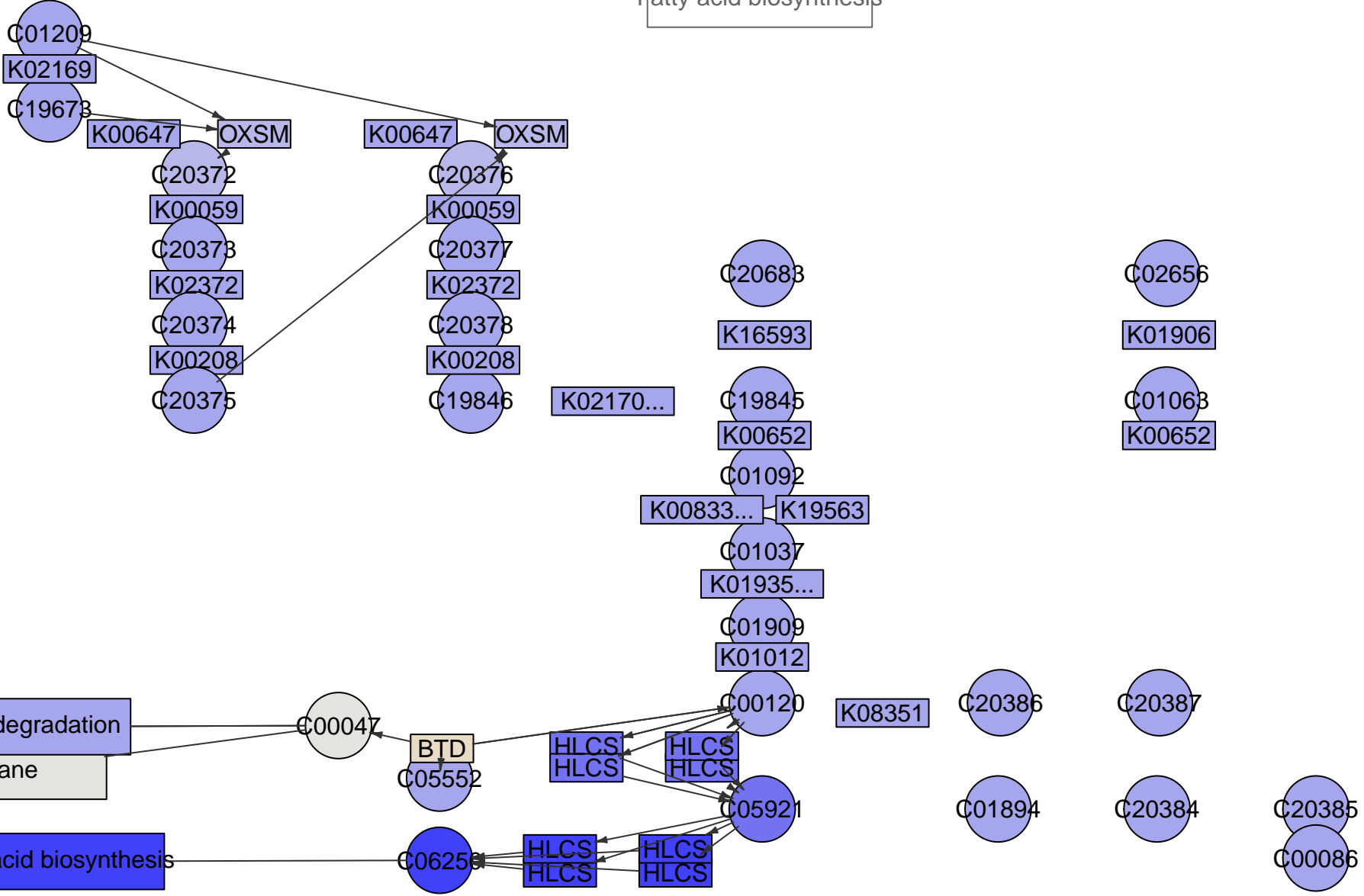
Biotin metabolism  
MPI-242

Fatty acid biosynthesis



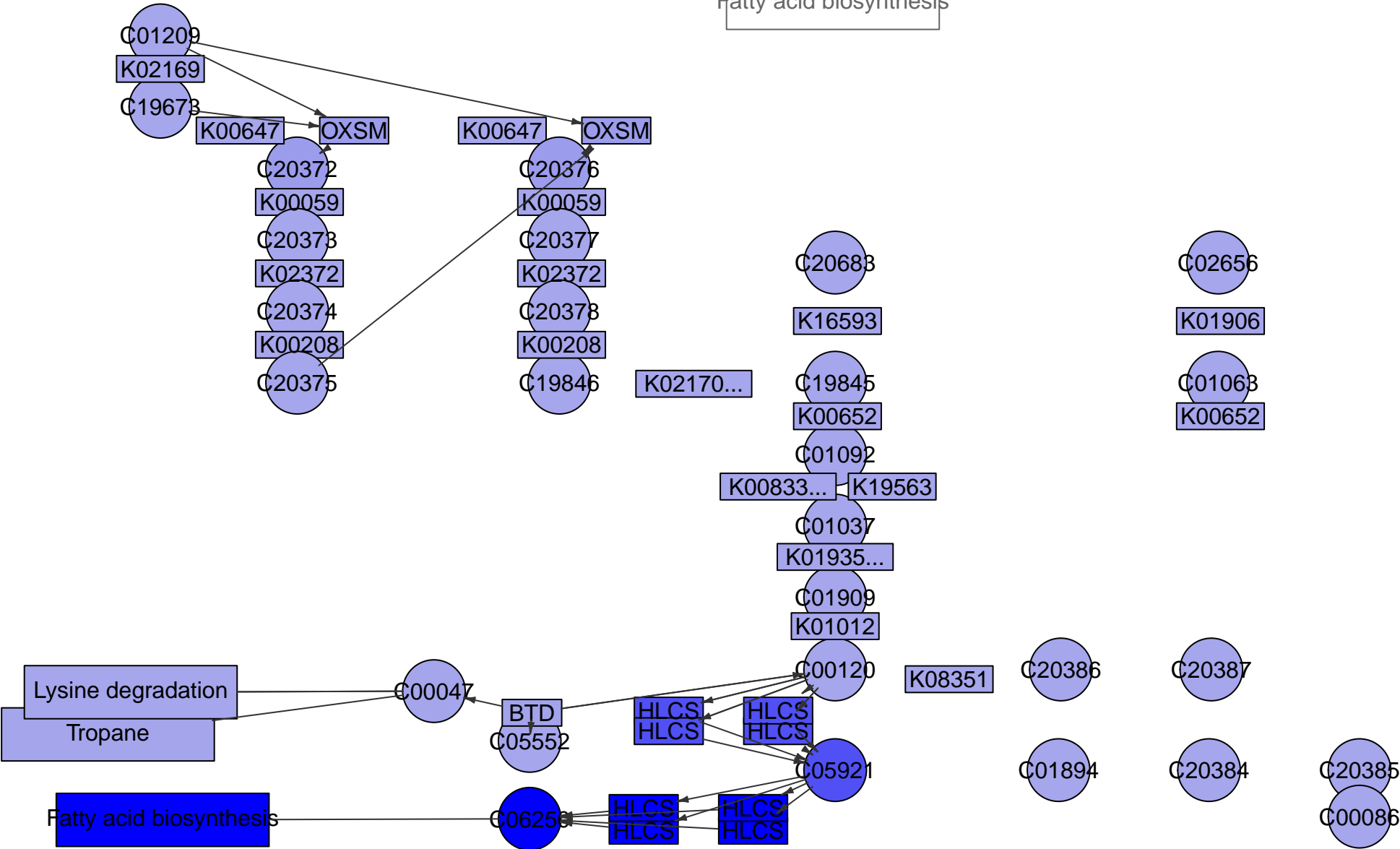
Biotin metabolism  
MPI-245

Fatty acid biosynthesis



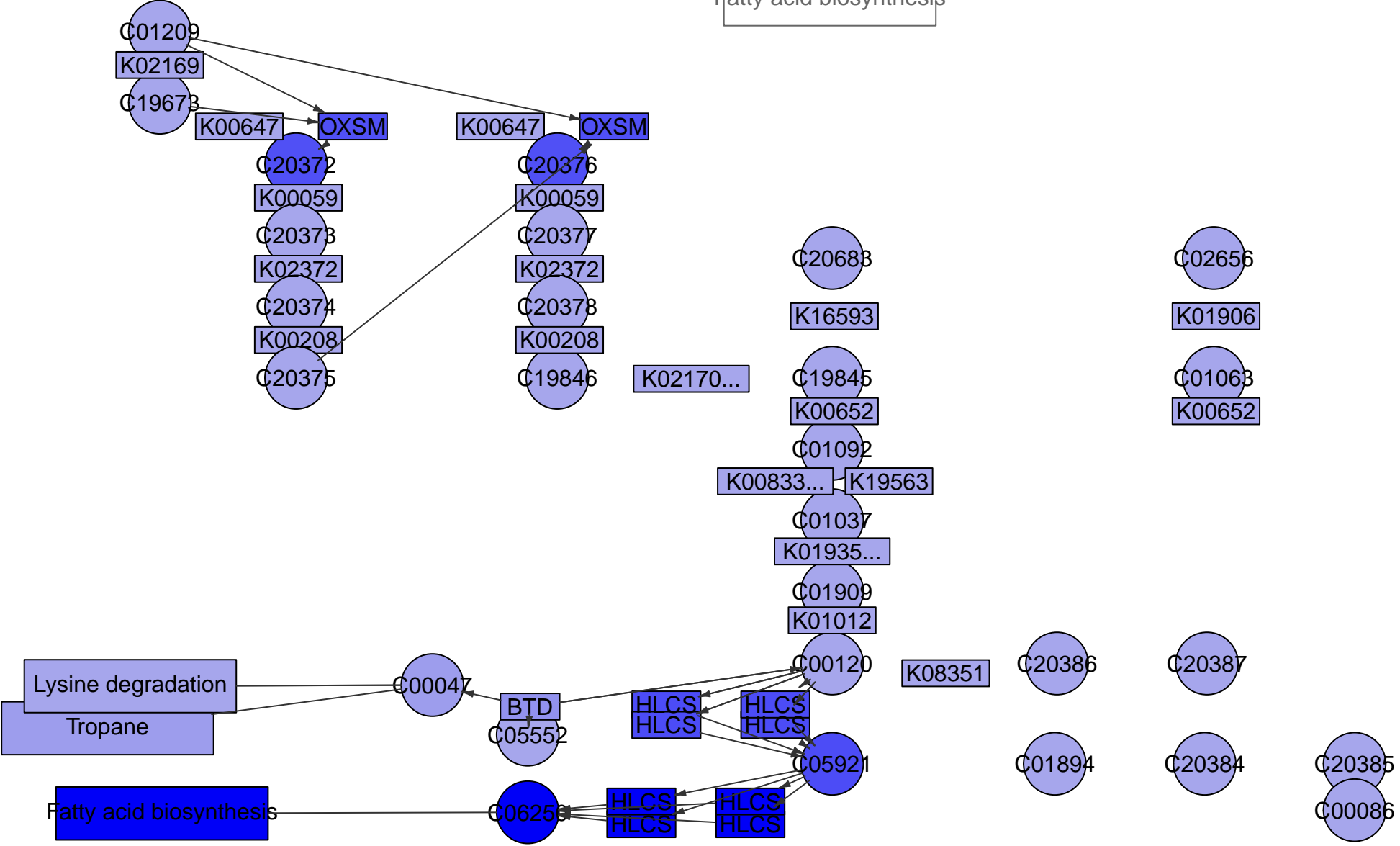
Biotin metabolism  
MPI-248

Fatty acid biosynthesis



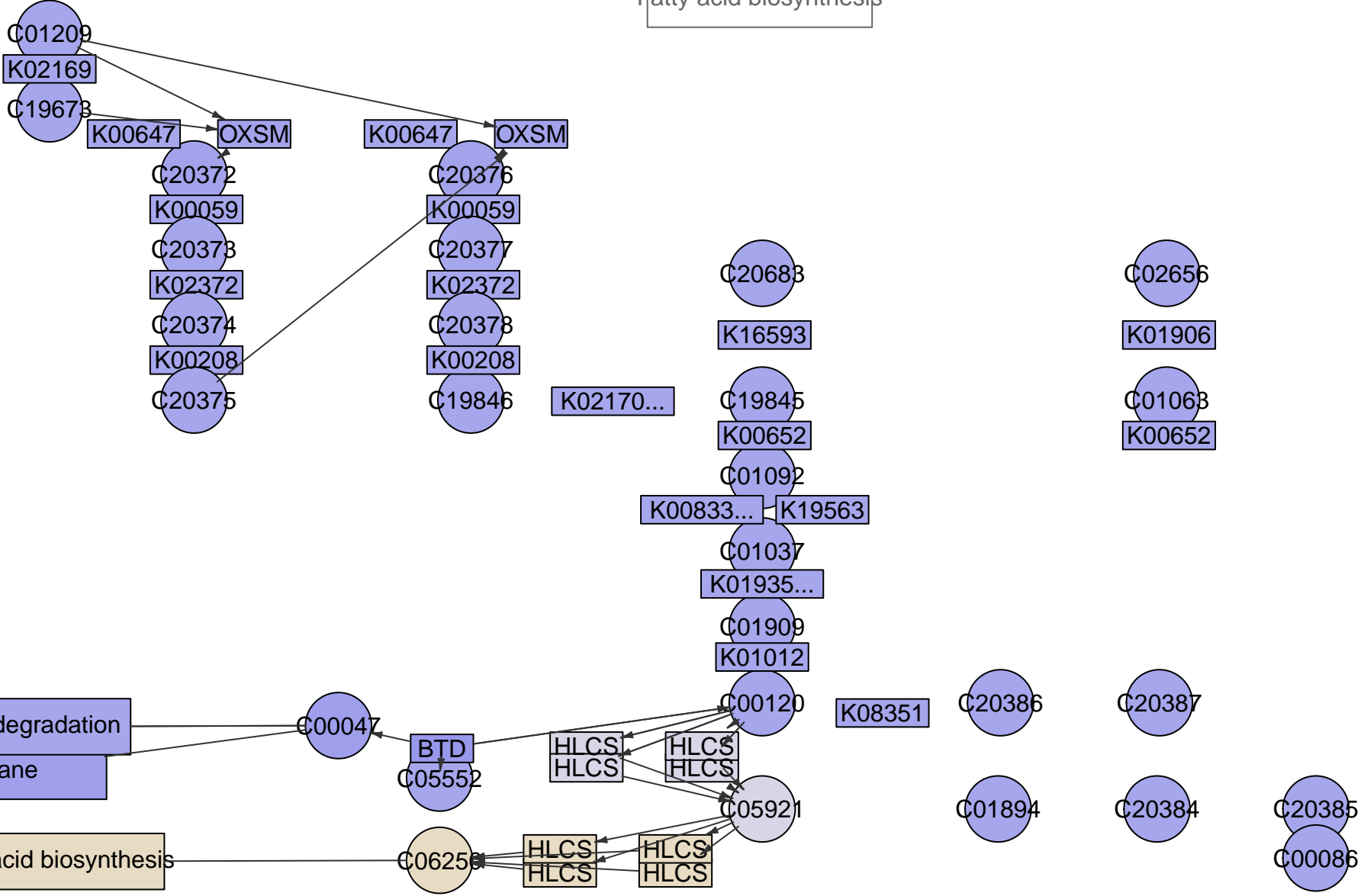
Biotin metabolism  
MPI-249

Fatty acid biosynthesis



Biotin metabolism  
MPI-250

Fatty acid biosynthesis

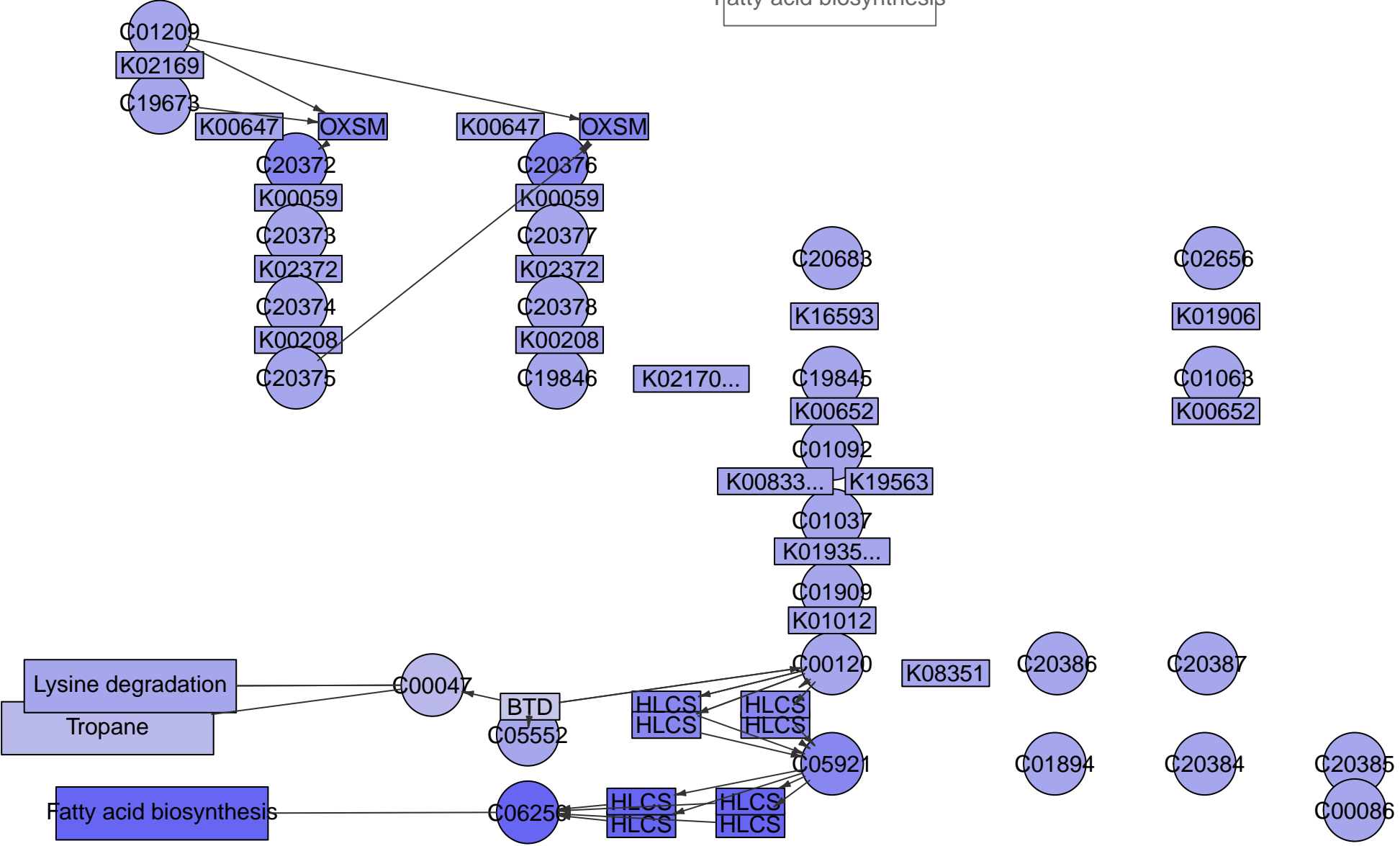


Lysine degradation  
Tropane

Fatty acid biosynthesis

Biotin metabolism  
MPI-008

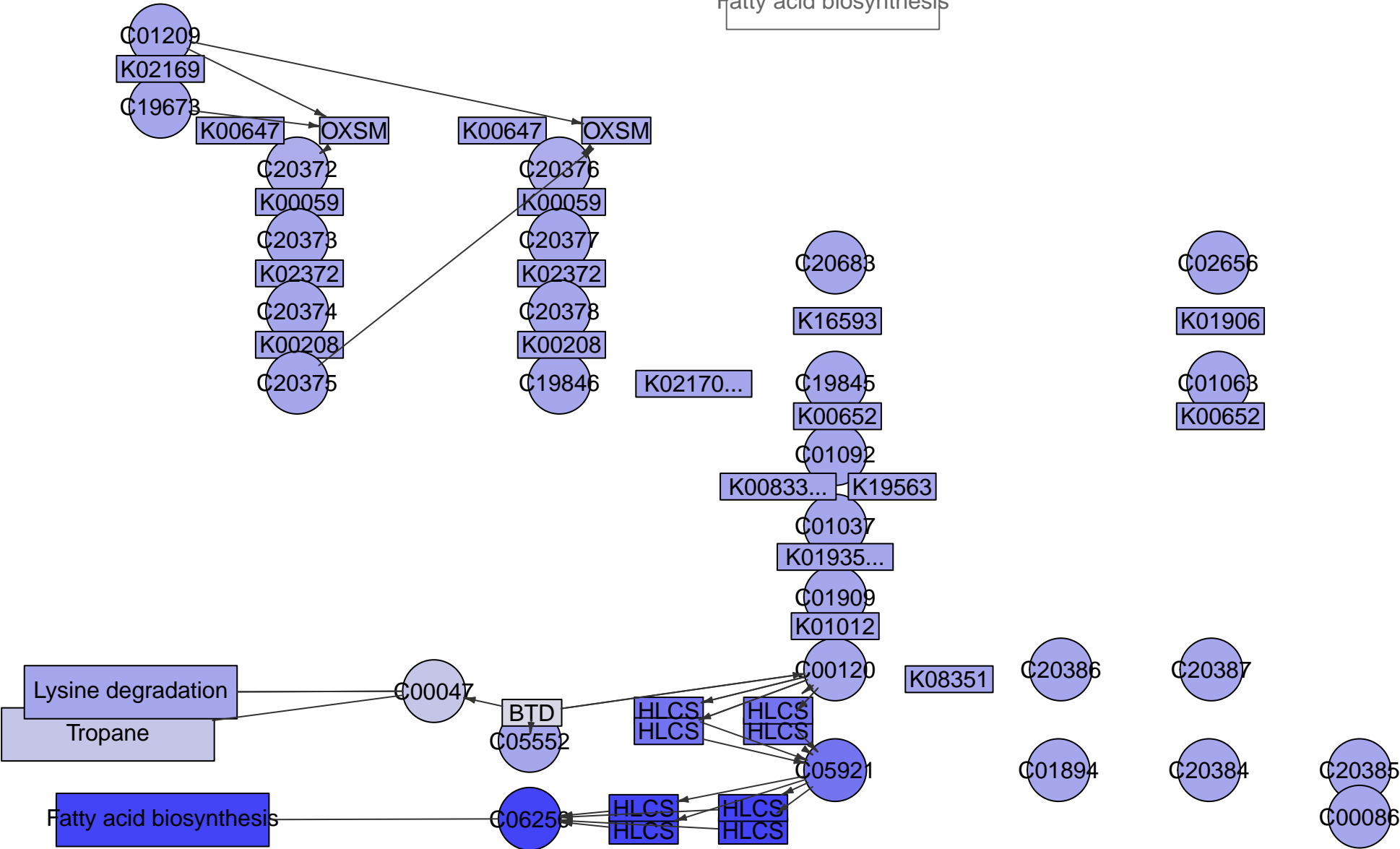
Fatty acid biosynthesis





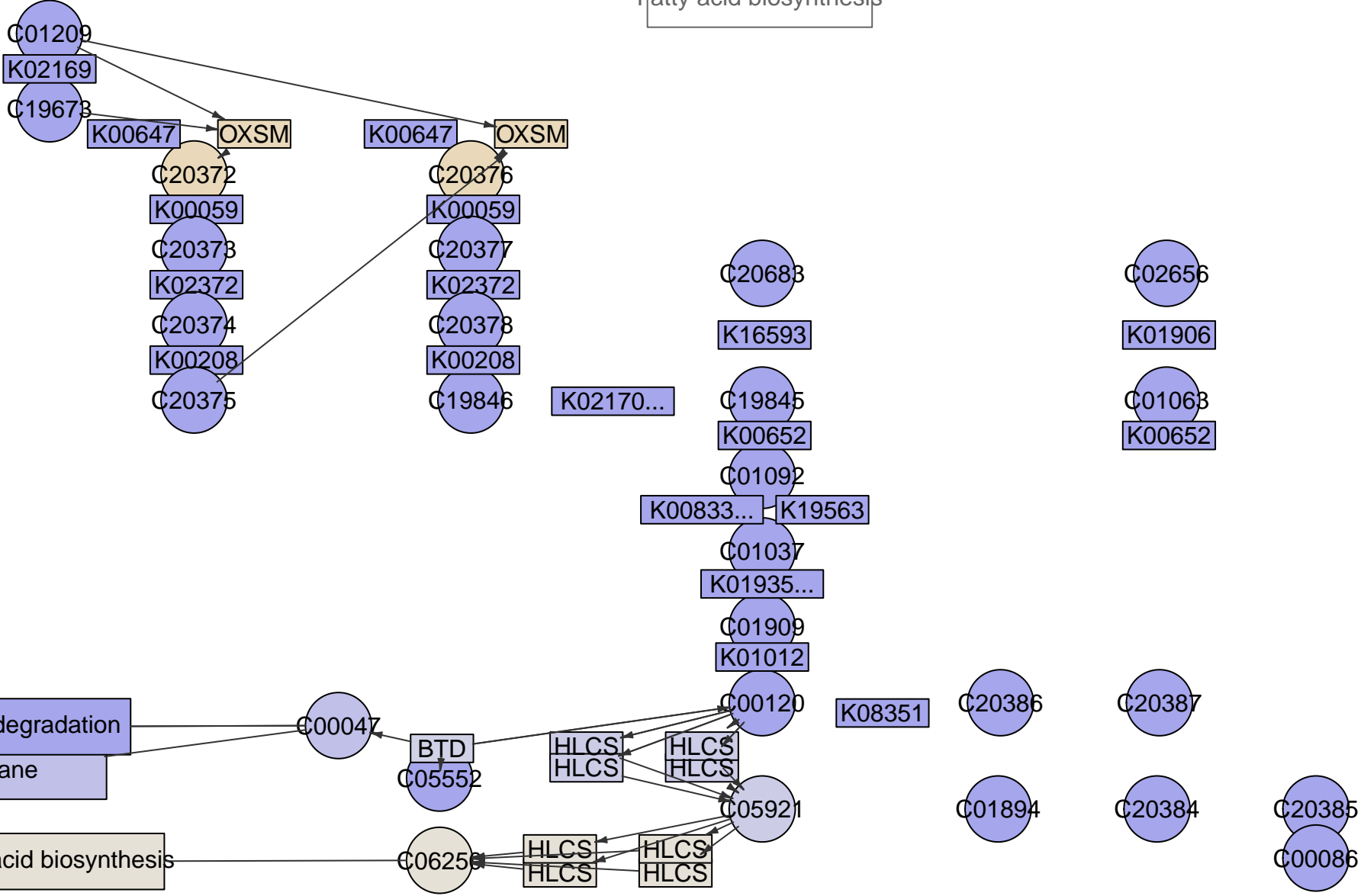
Biotin metabolism  
MPI-009

Fatty acid biosynthesis



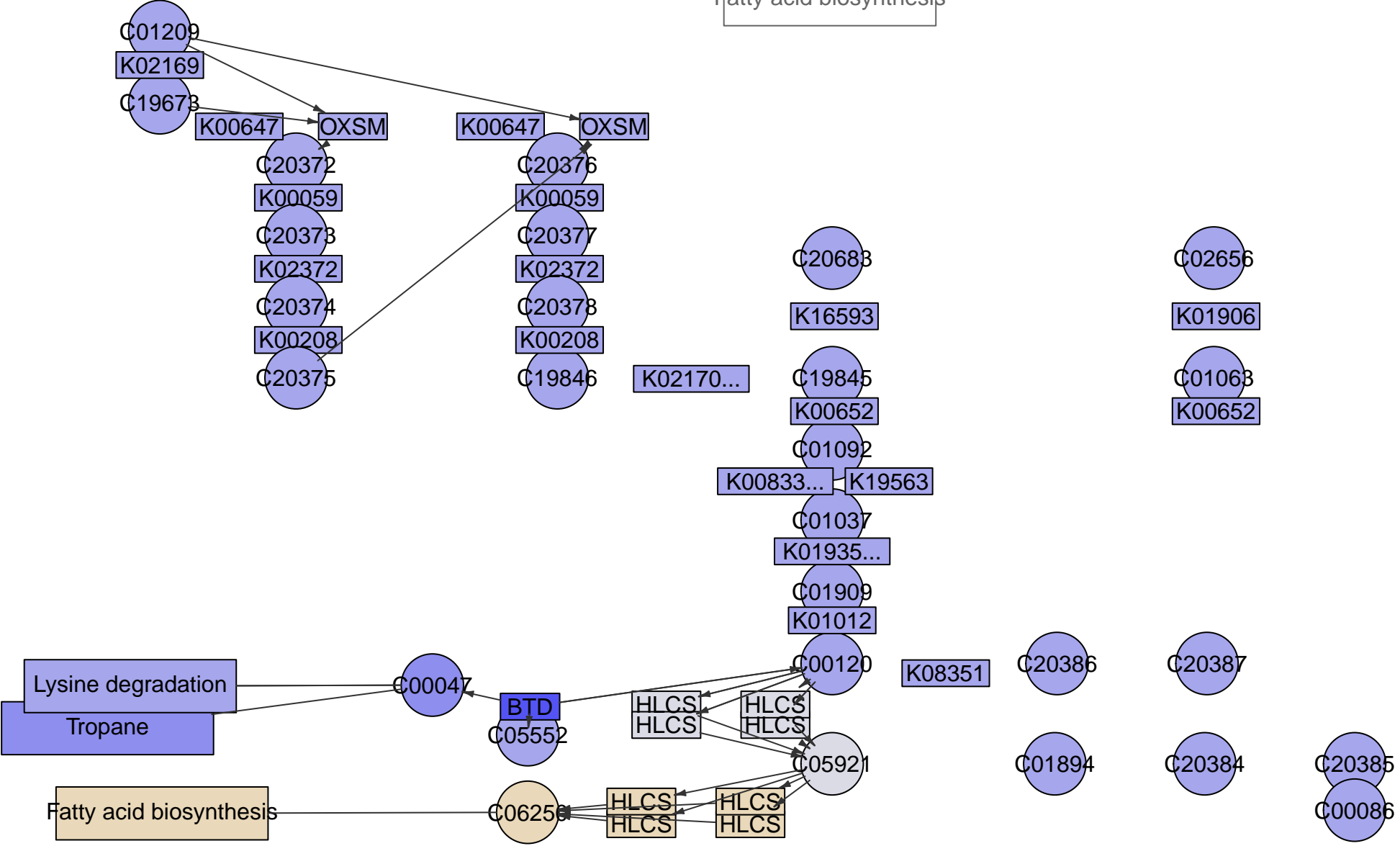
Biotin metabolism  
MPI-010

Fatty acid biosynthesis



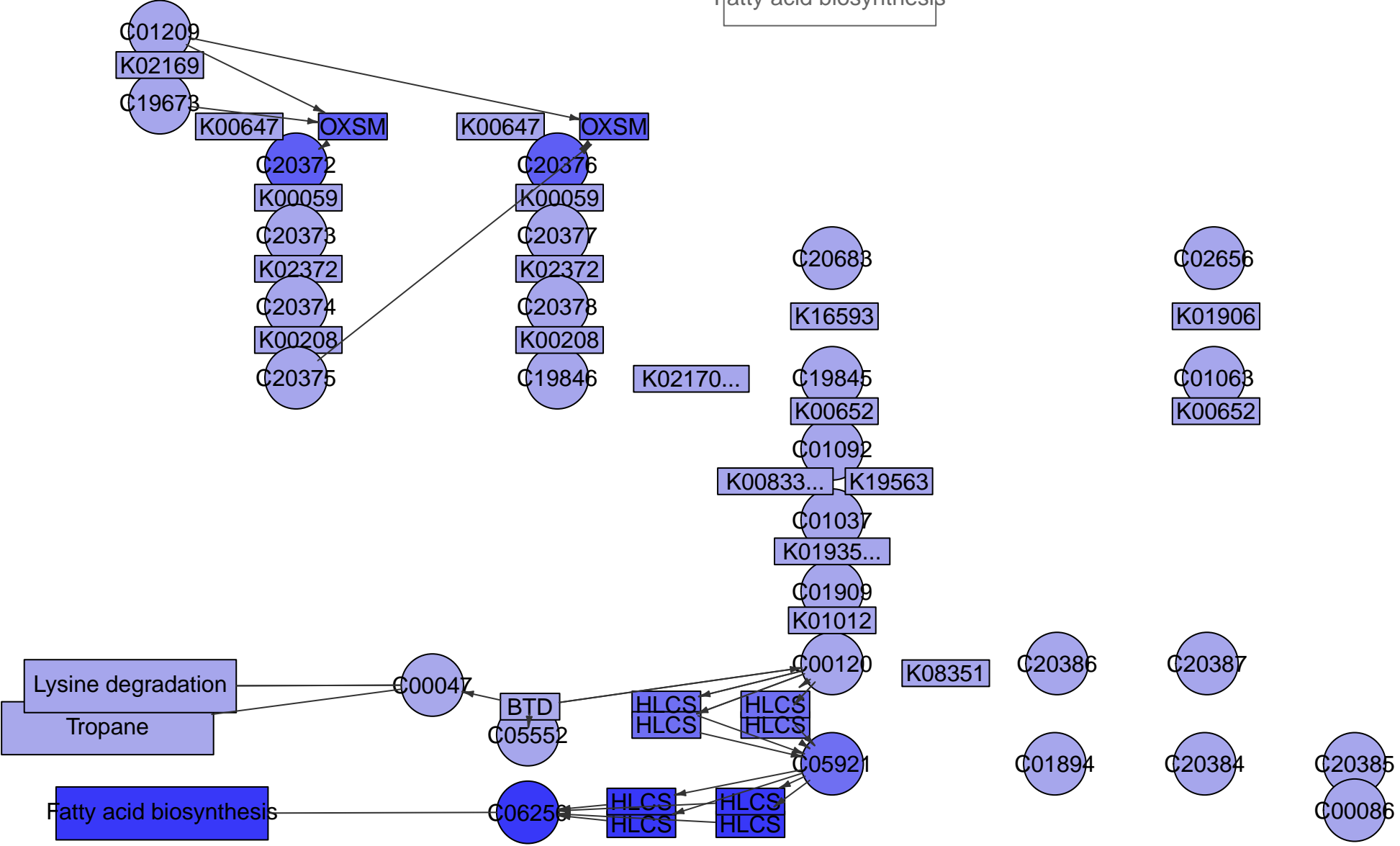
Biotin metabolism  
MPI-012

Fatty acid biosynthesis



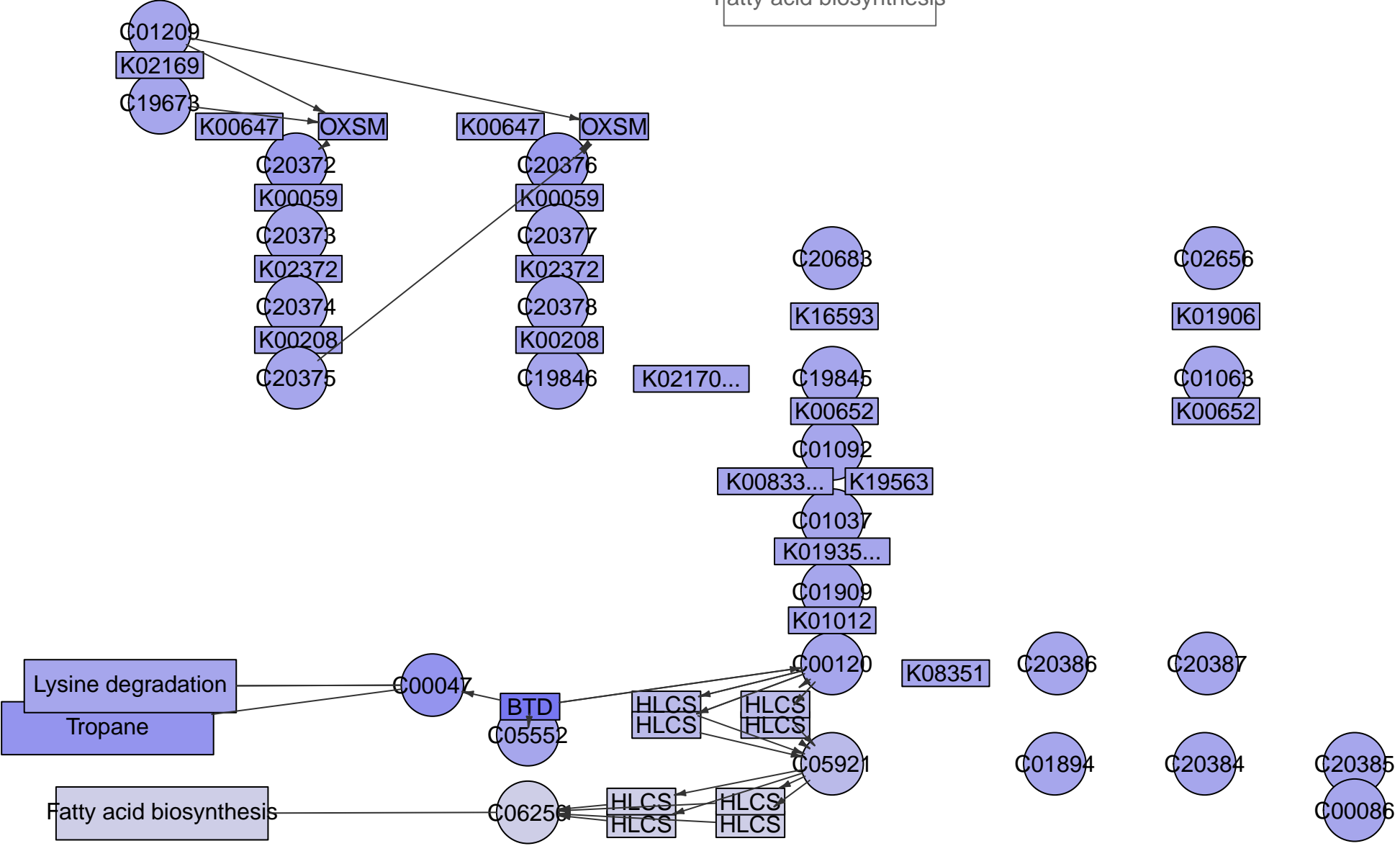
Biotin metabolism  
MPI-013

Fatty acid biosynthesis



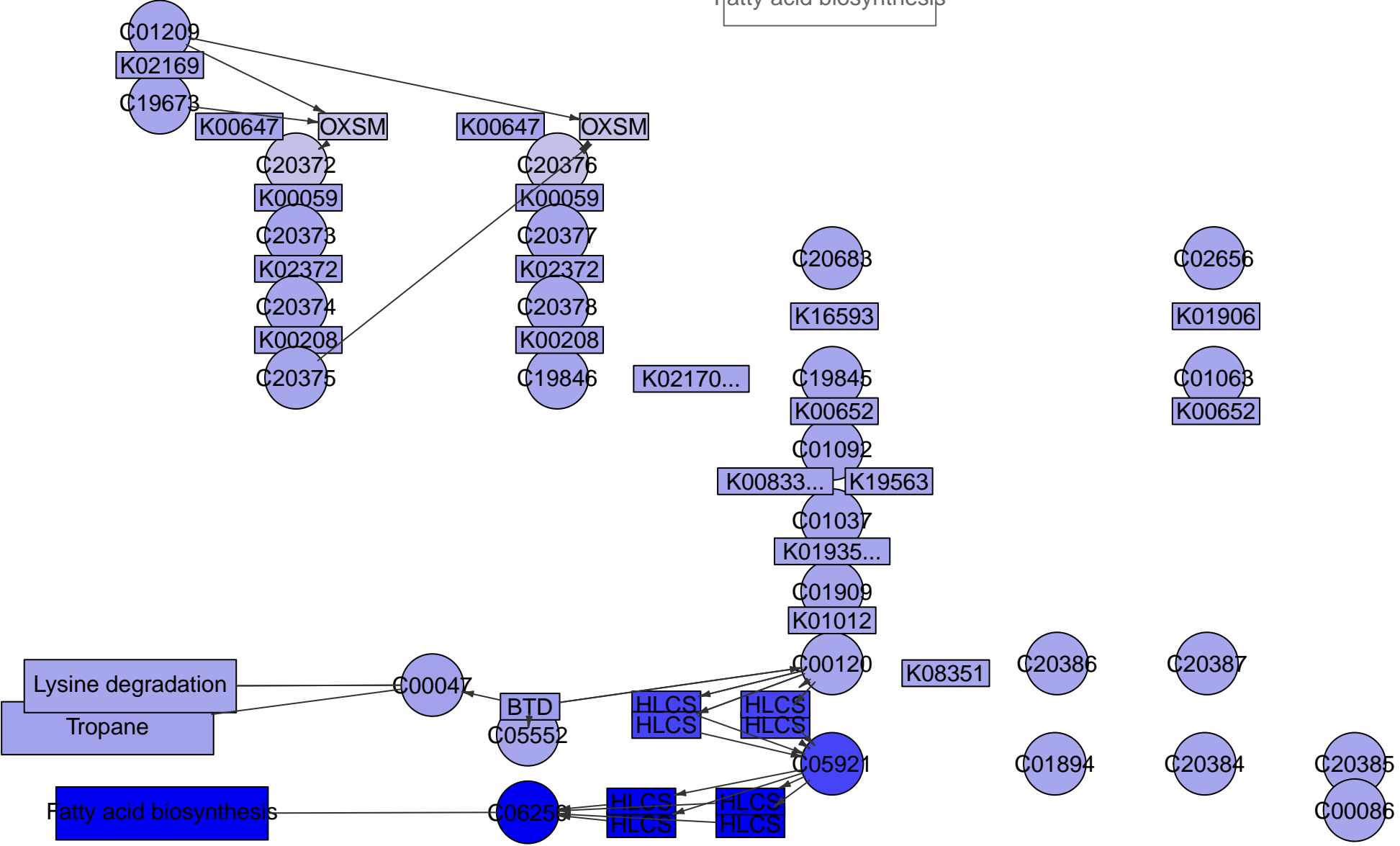
Biotin metabolism  
MPI-014

Fatty acid biosynthesis



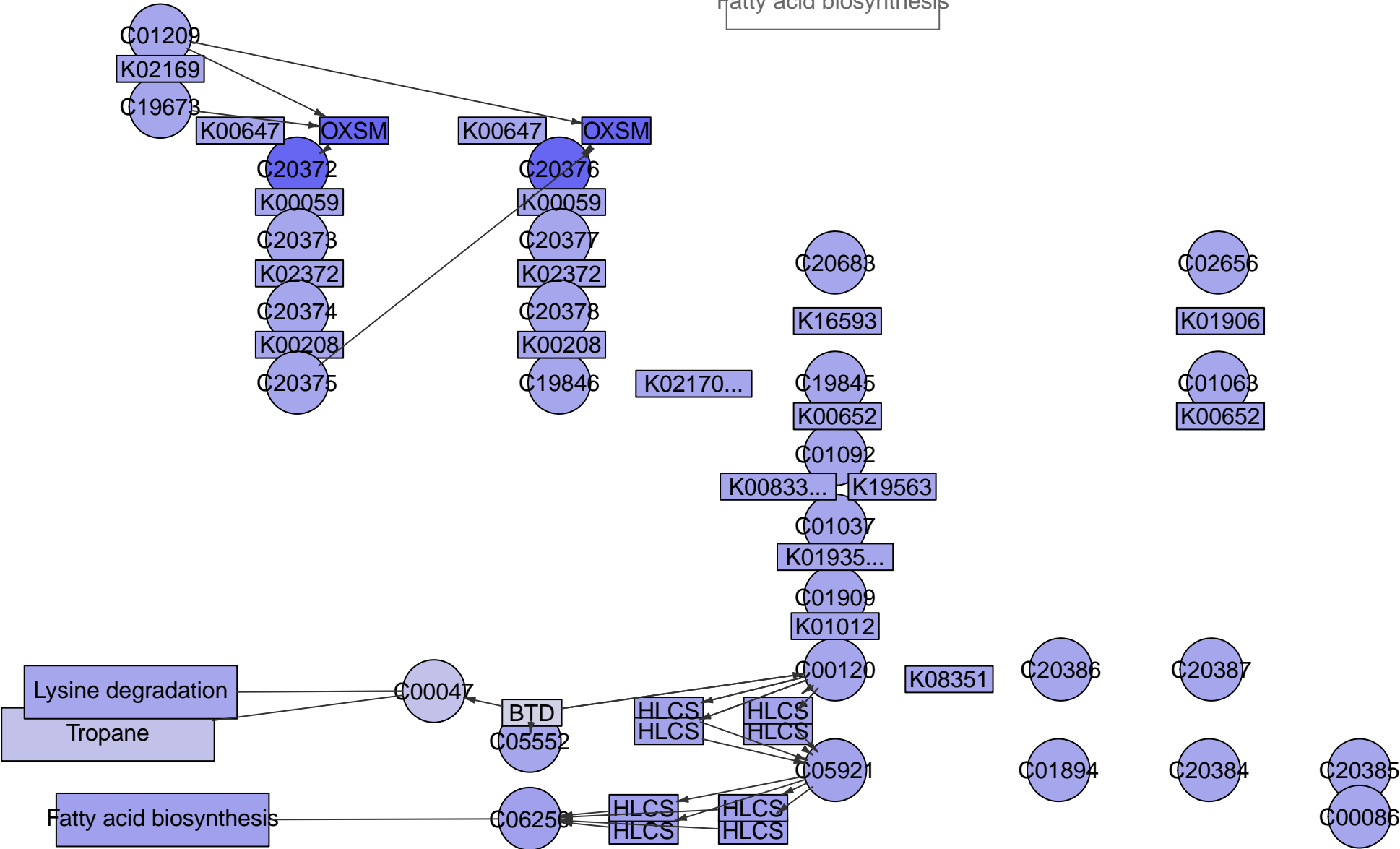
Biotin metabolism  
MPI-015

Fatty acid biosynthesis



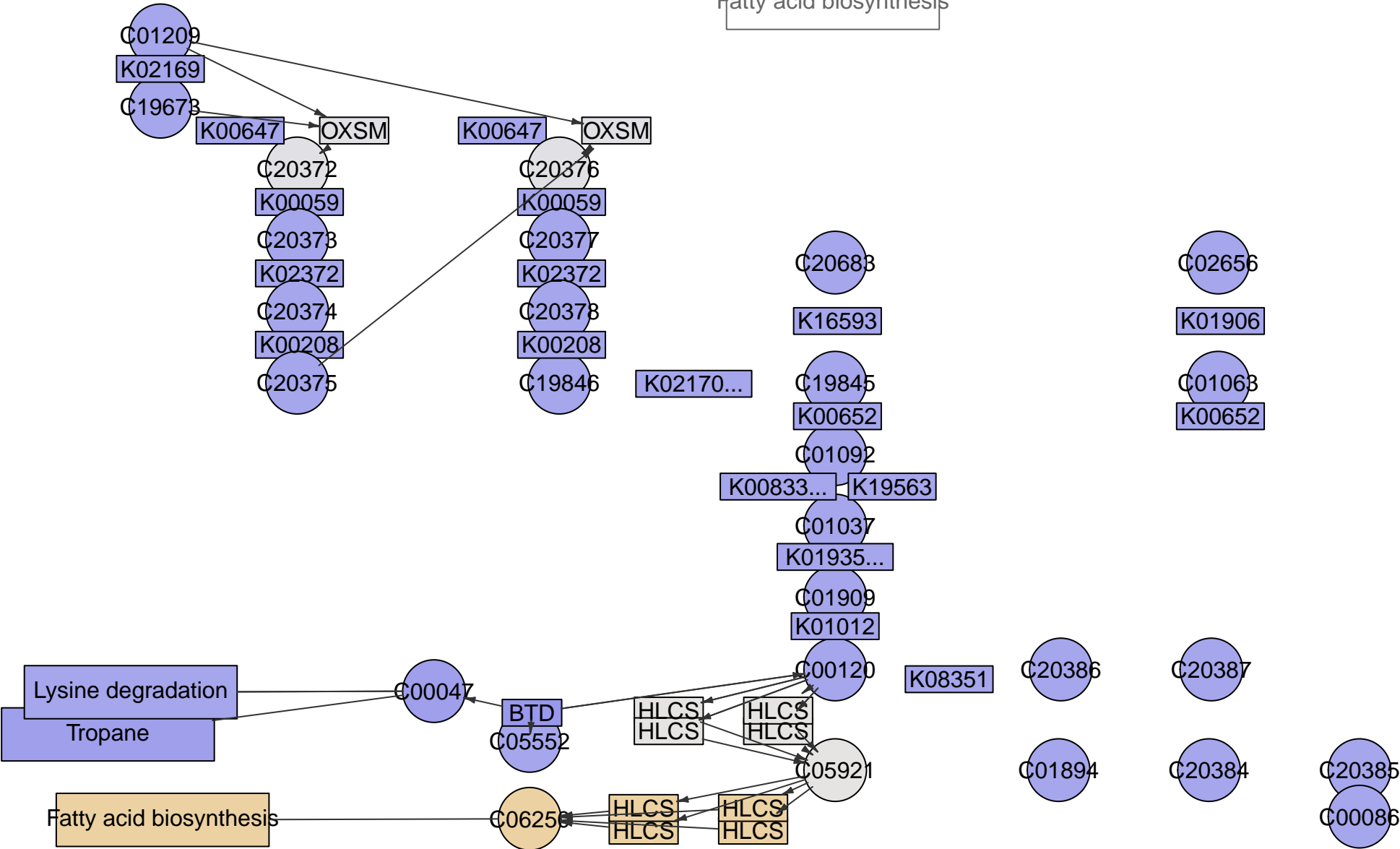
Biotin metabolism  
MPI-021

Fatty acid biosynthesis



Biotin metabolism  
MPI-022

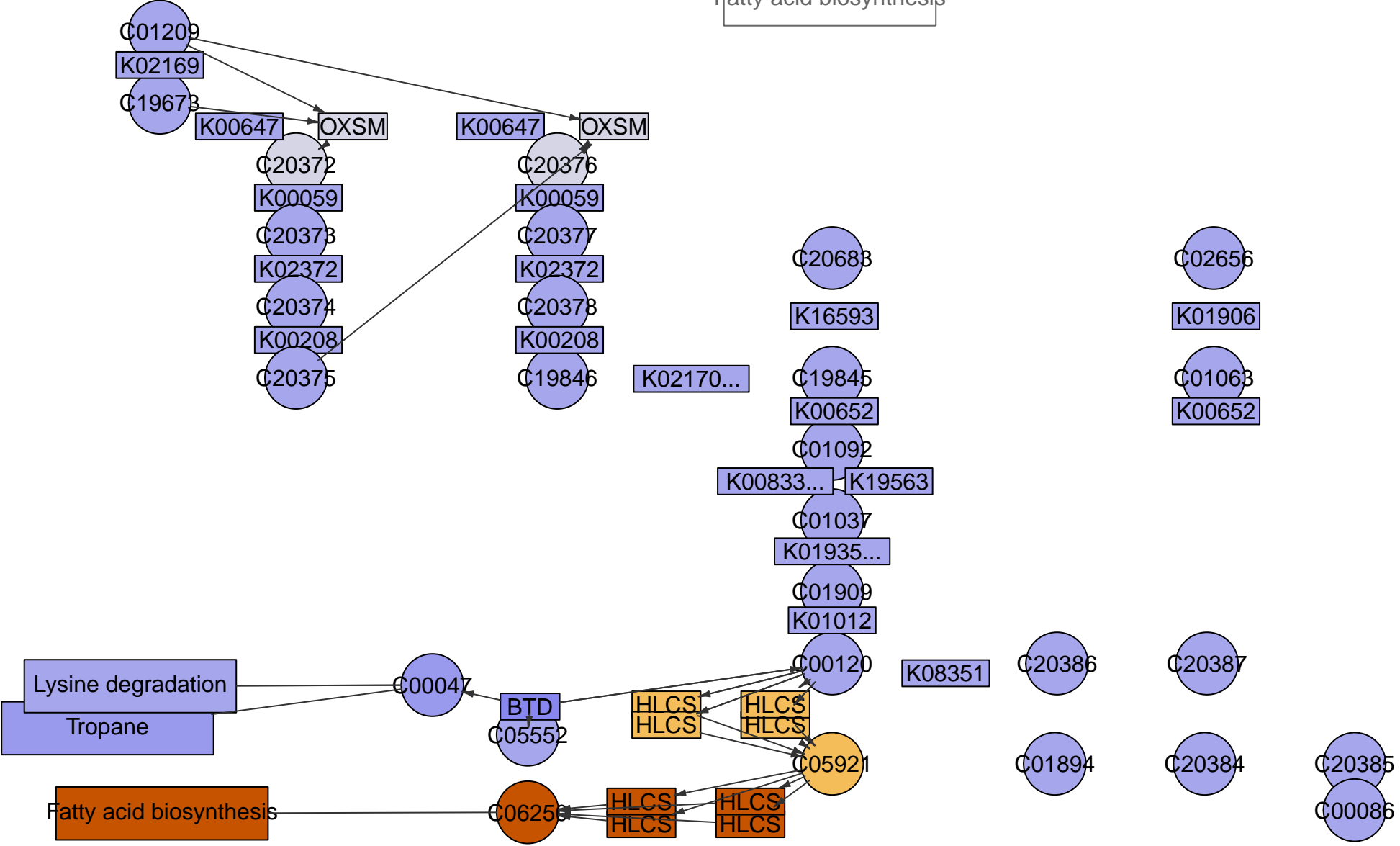
Fatty acid biosynthesis





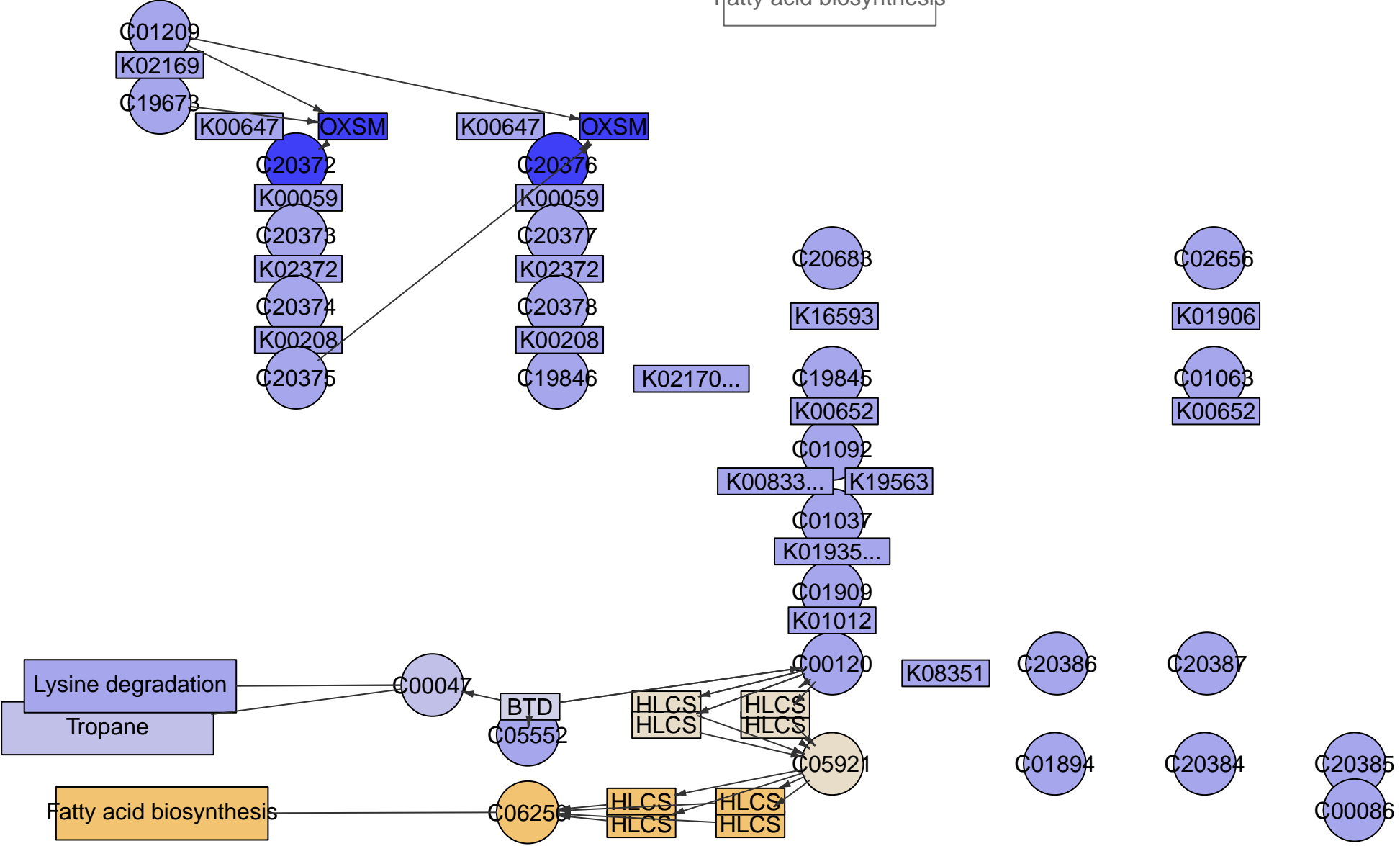
Biotin metabolism  
MPI-025

Fatty acid biosynthesis



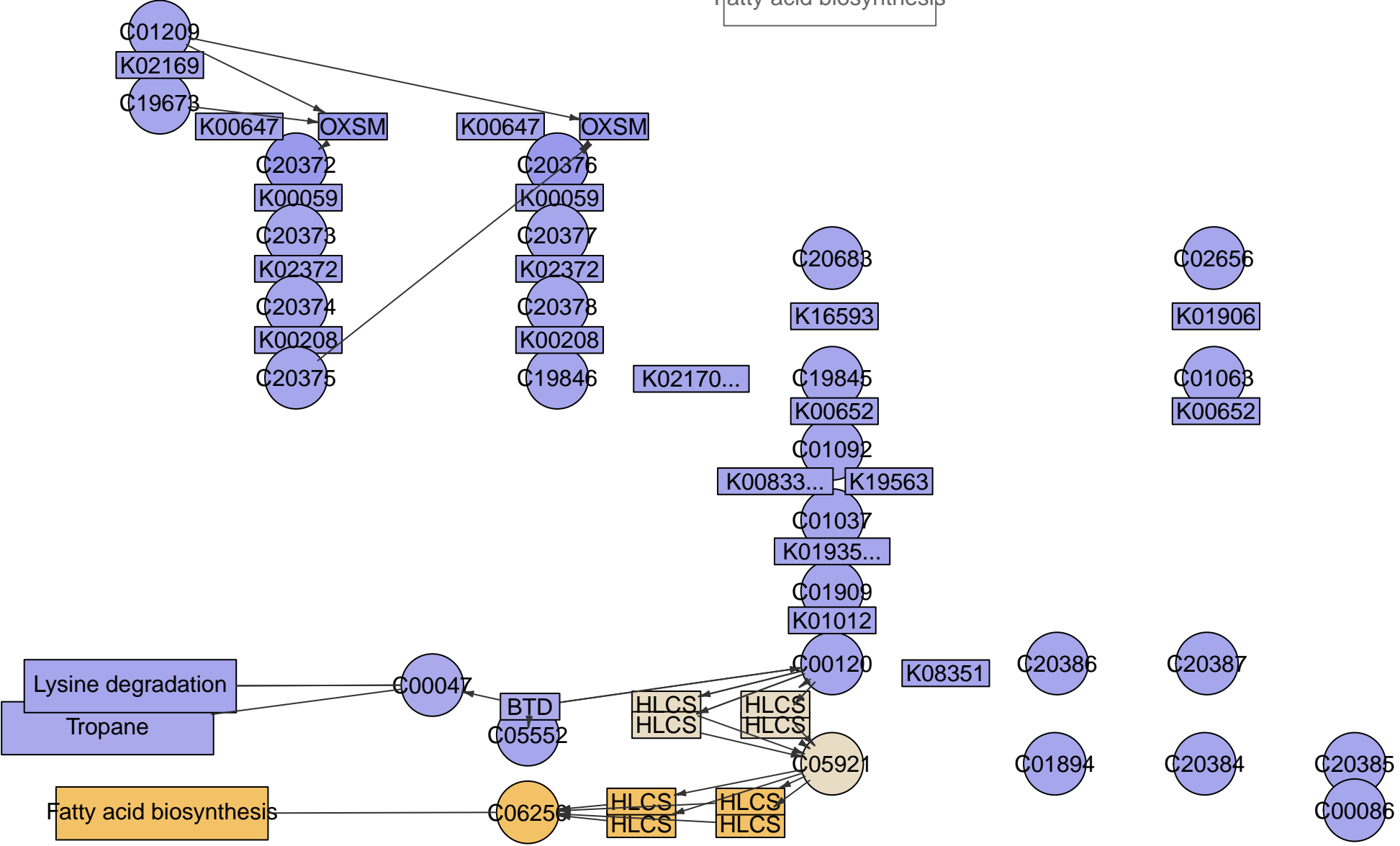
Biotin metabolism  
MPI-029

Fatty acid biosynthesis



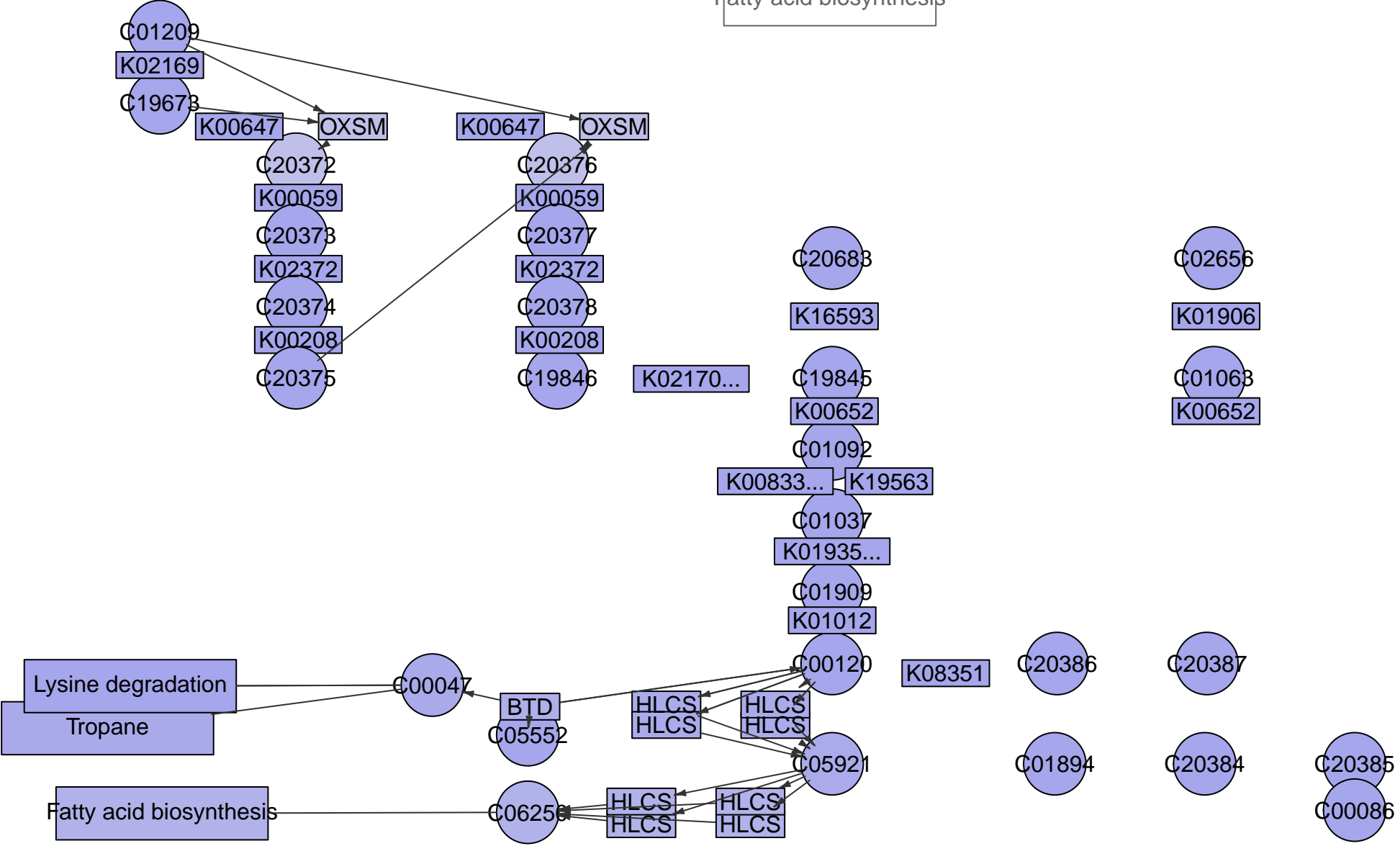
Biotin metabolism  
MPI-030

Fatty acid biosynthesis



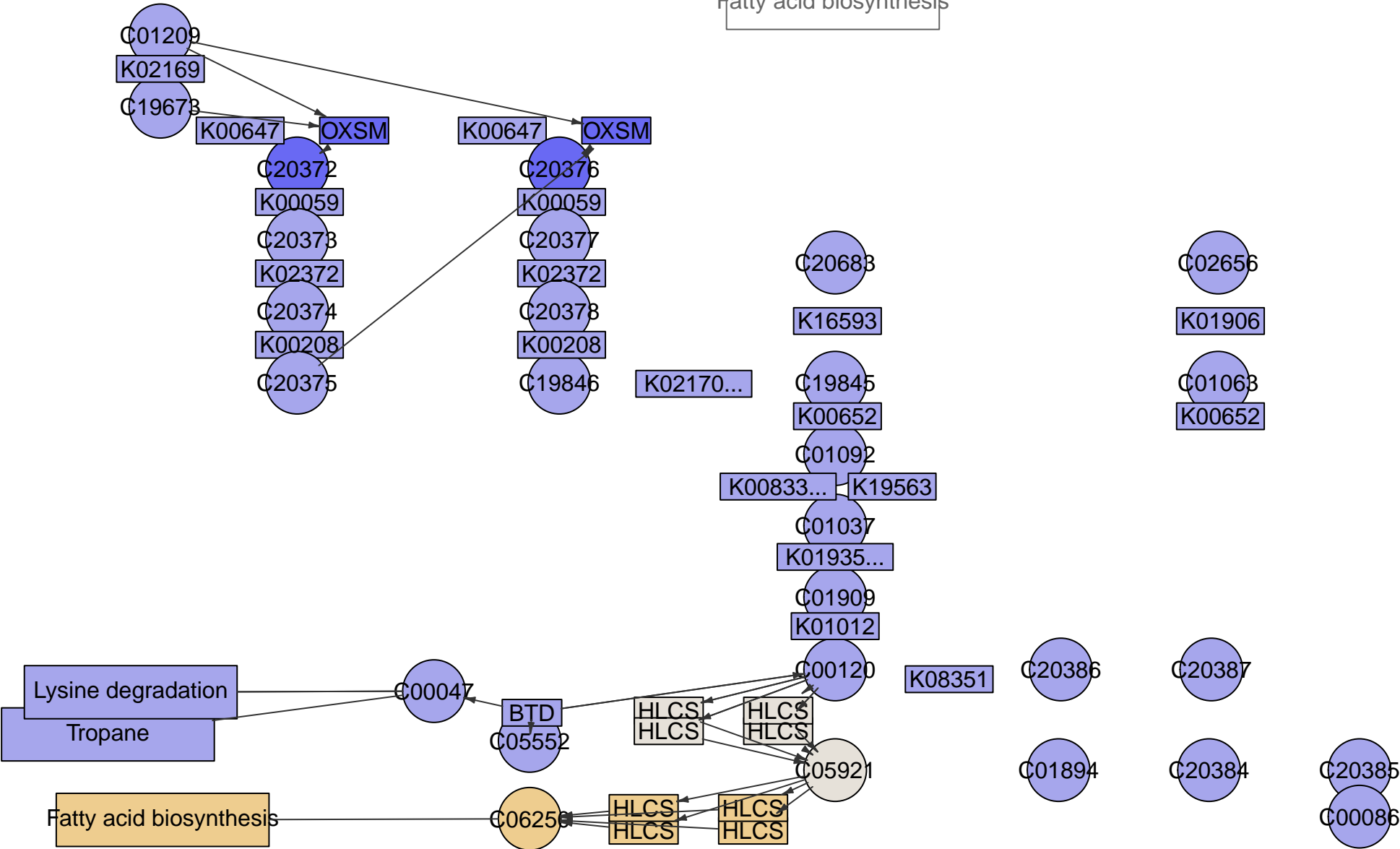
Biotin metabolism  
MPI-031

Fatty acid biosynthesis



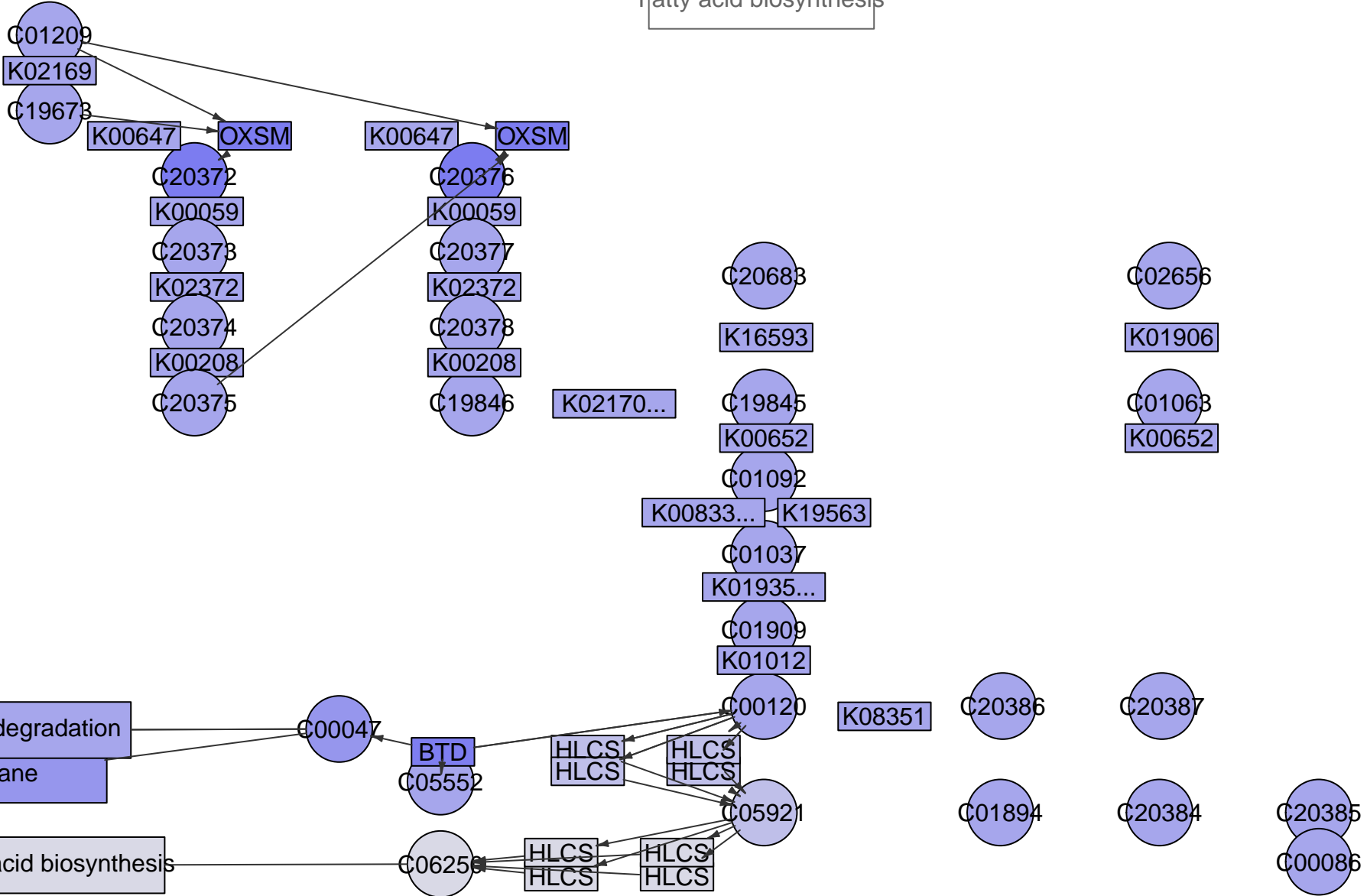
Biotin metabolism  
MPI-039

Fatty acid biosynthesis



Biotin metabolism  
MPI-040

Fatty acid biosynthesis



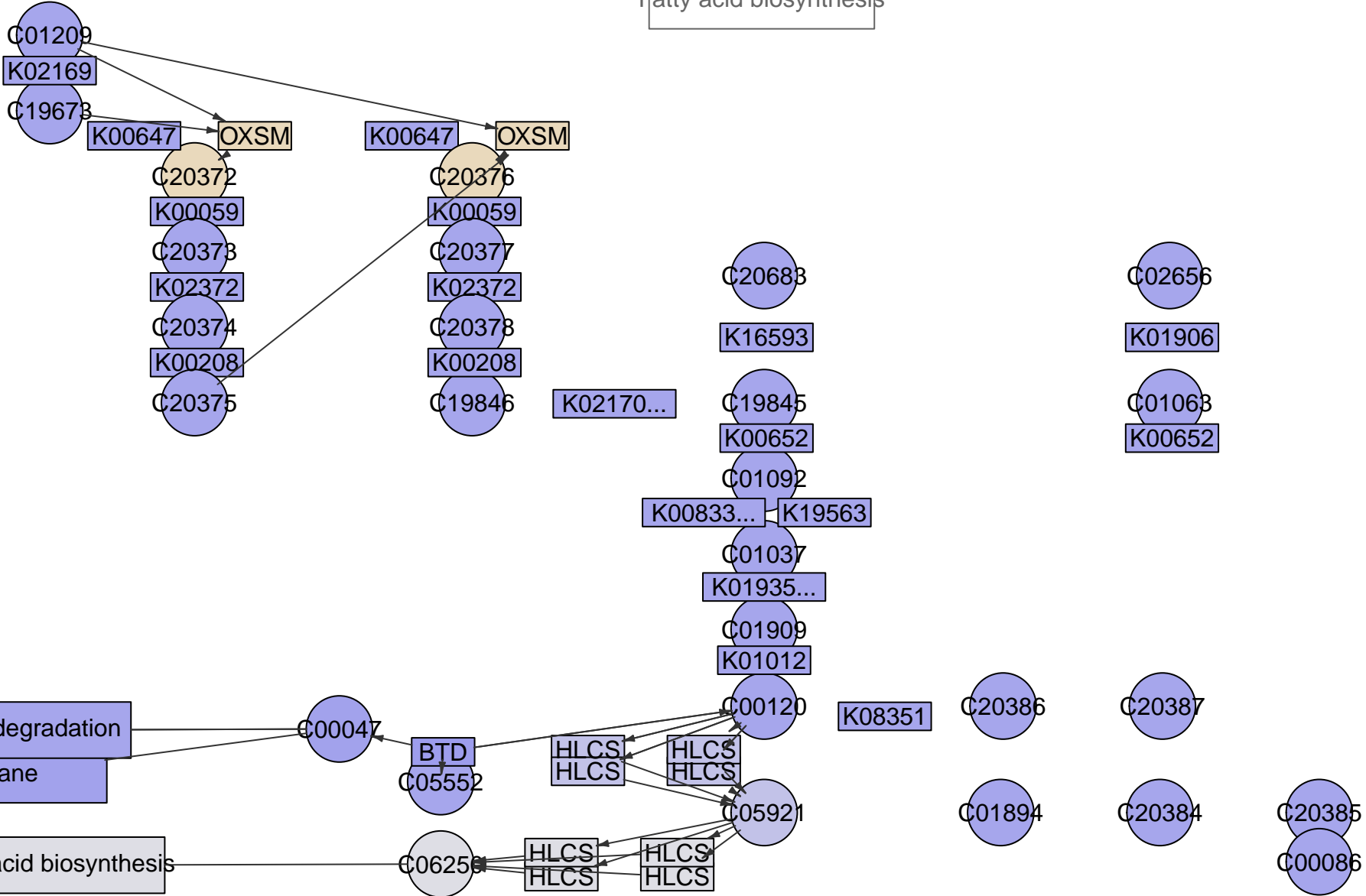
Lysine degradation

Tropane

Fatty acid biosynthesis

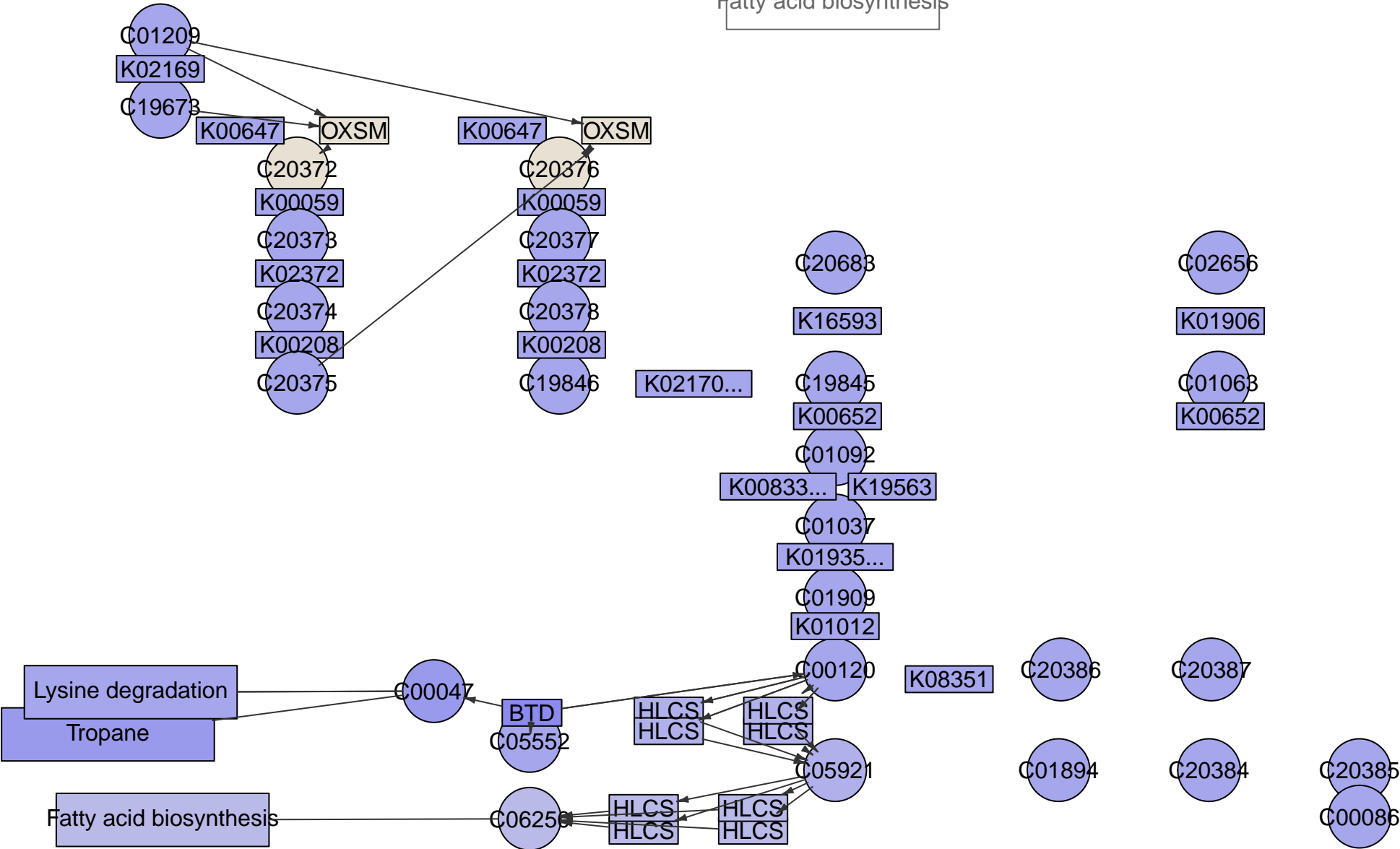
Biotin metabolism  
MPI-045

Fatty acid biosynthesis



Biotin metabolism  
MPI-047

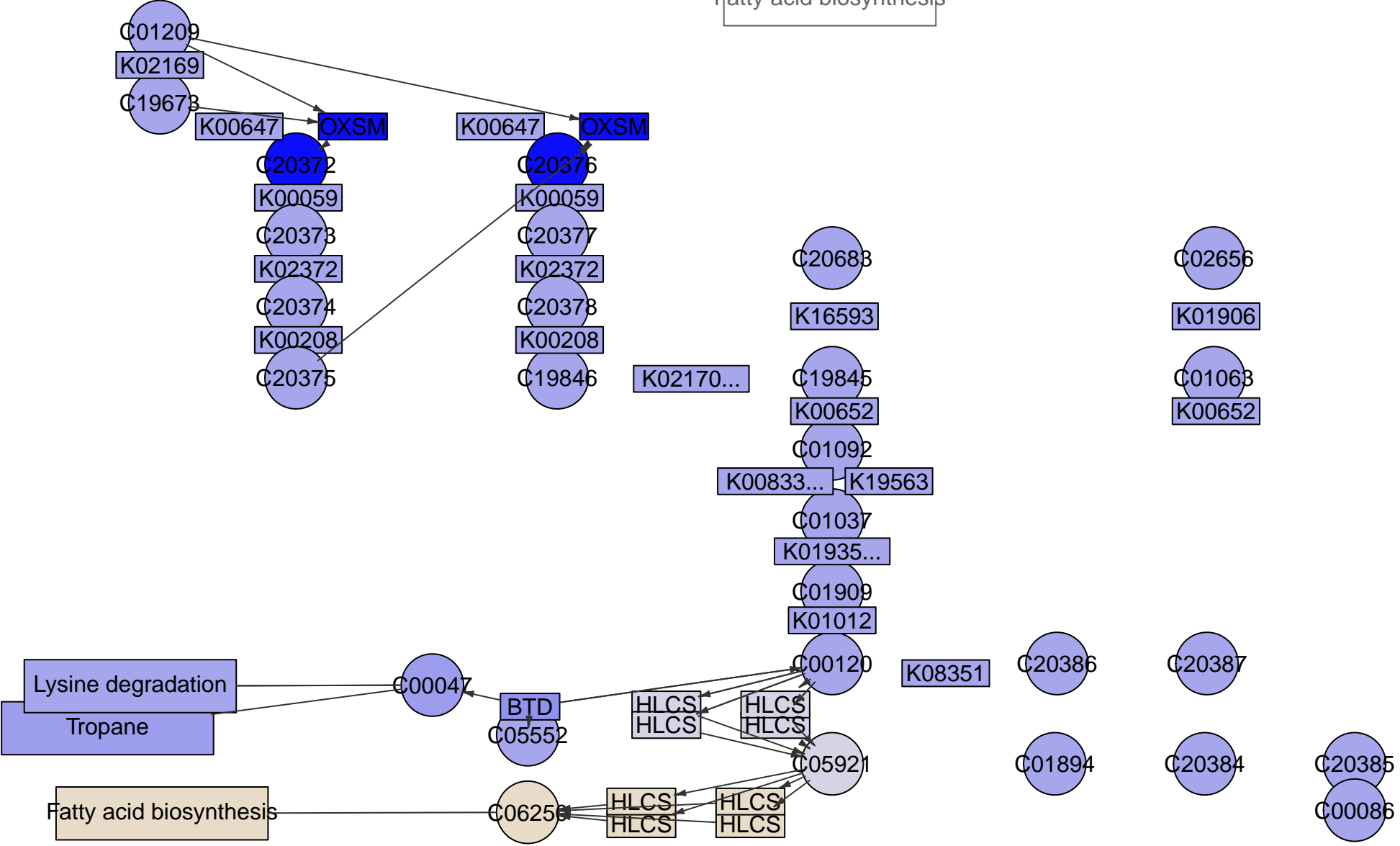
Fatty acid biosynthesis





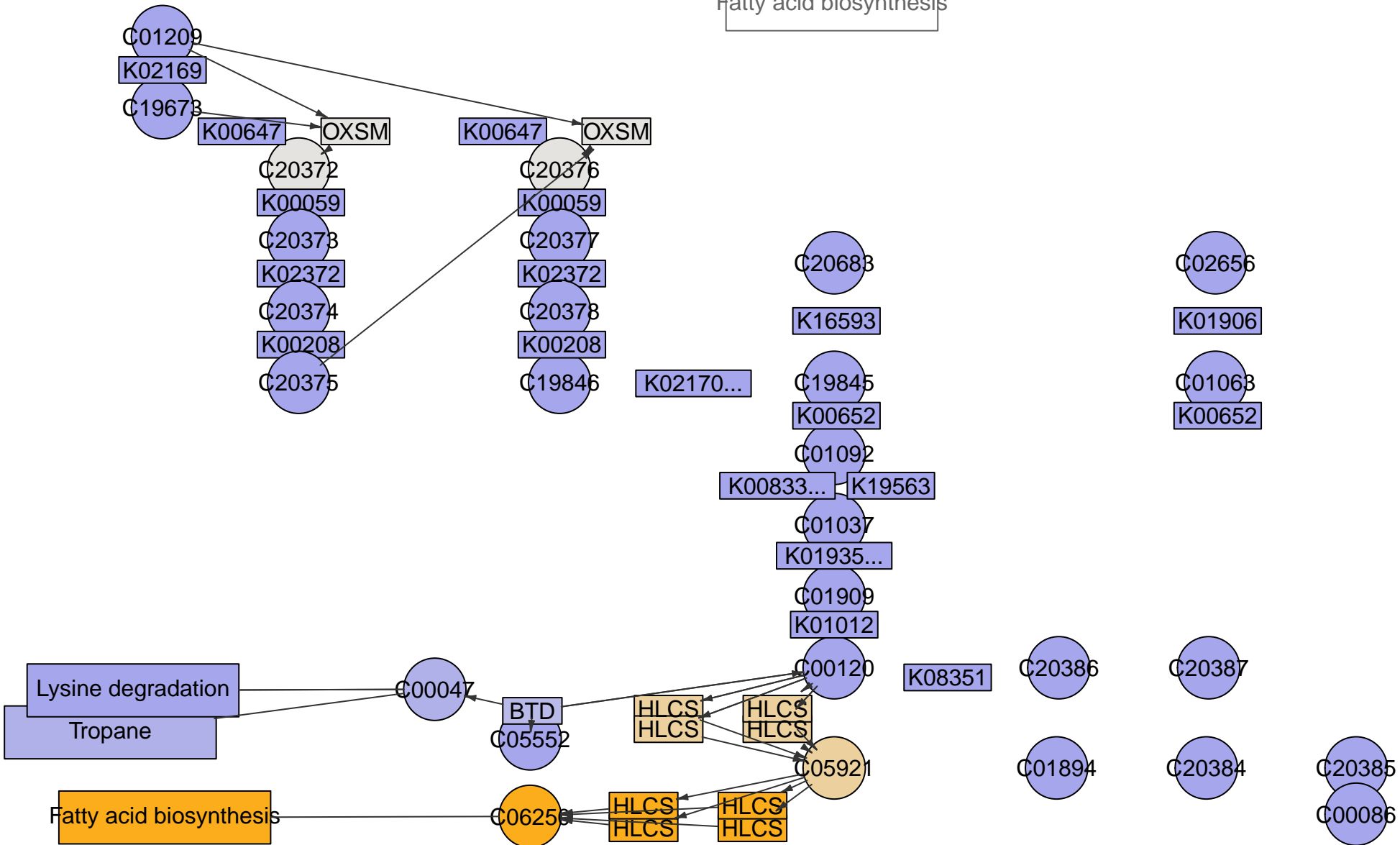
Biotin metabolism  
MPI-053

Fatty acid biosynthesis



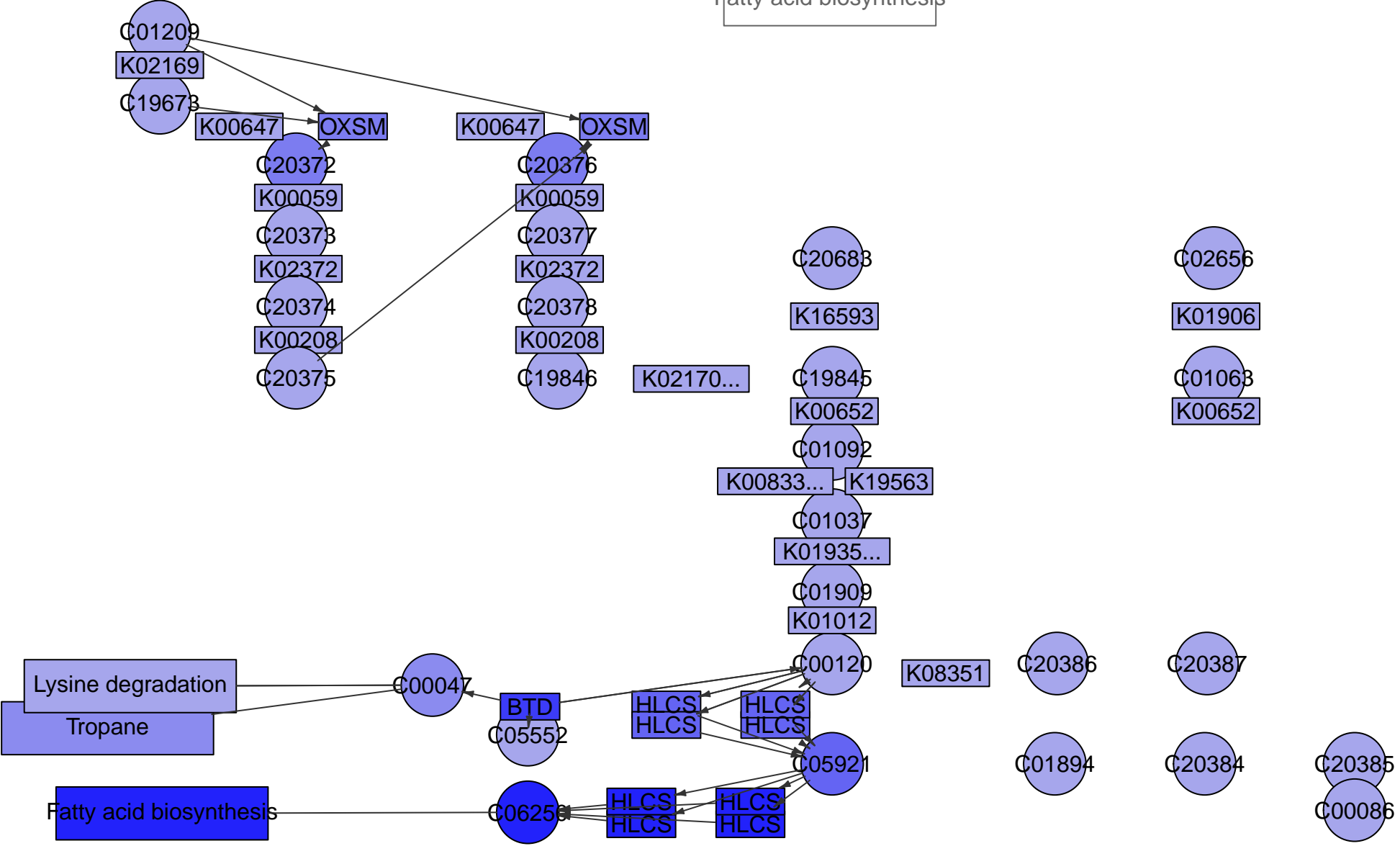
Biotin metabolism  
MPI-062

Fatty acid biosynthesis



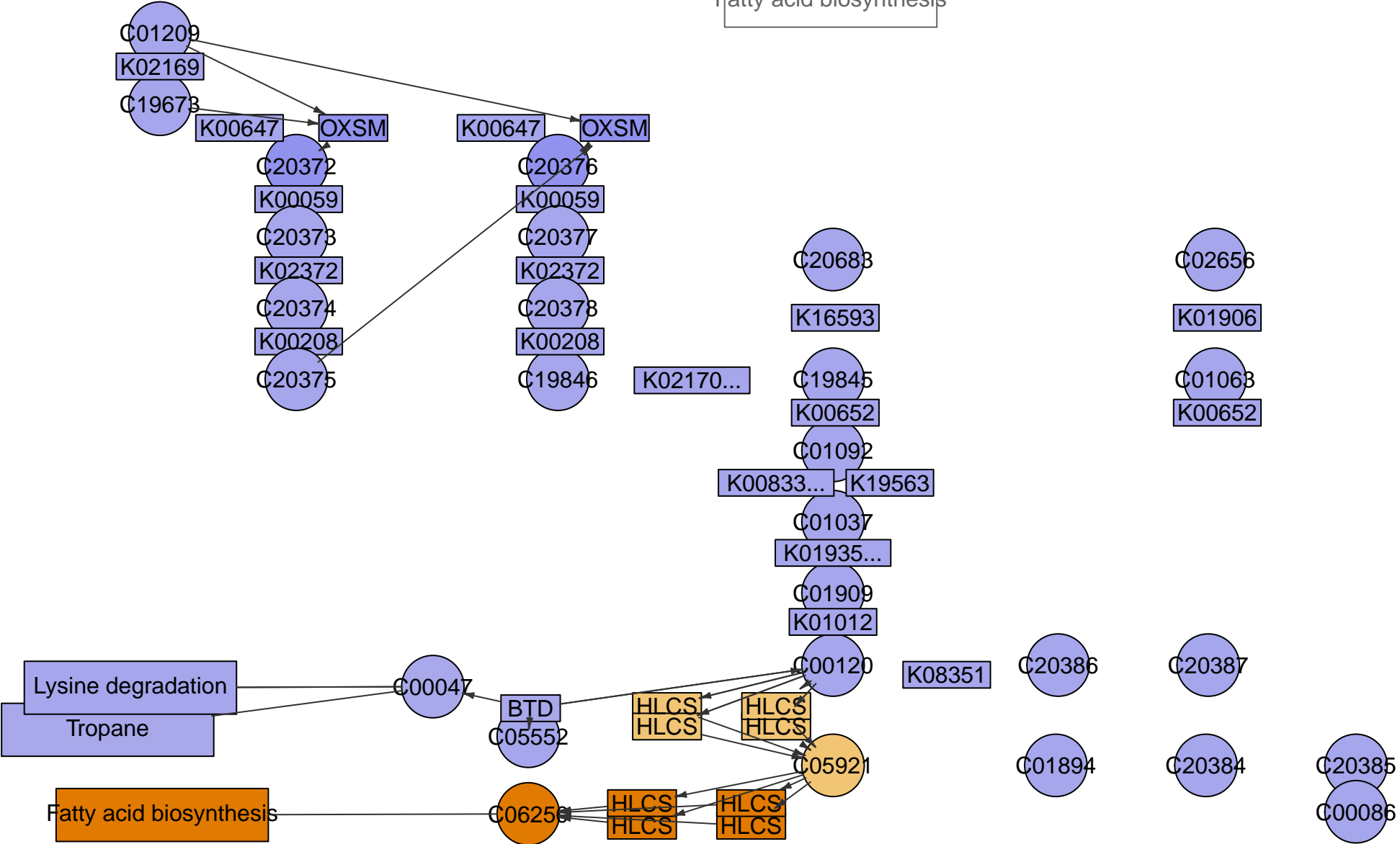
Biotin metabolism  
MPI-063

Fatty acid biosynthesis



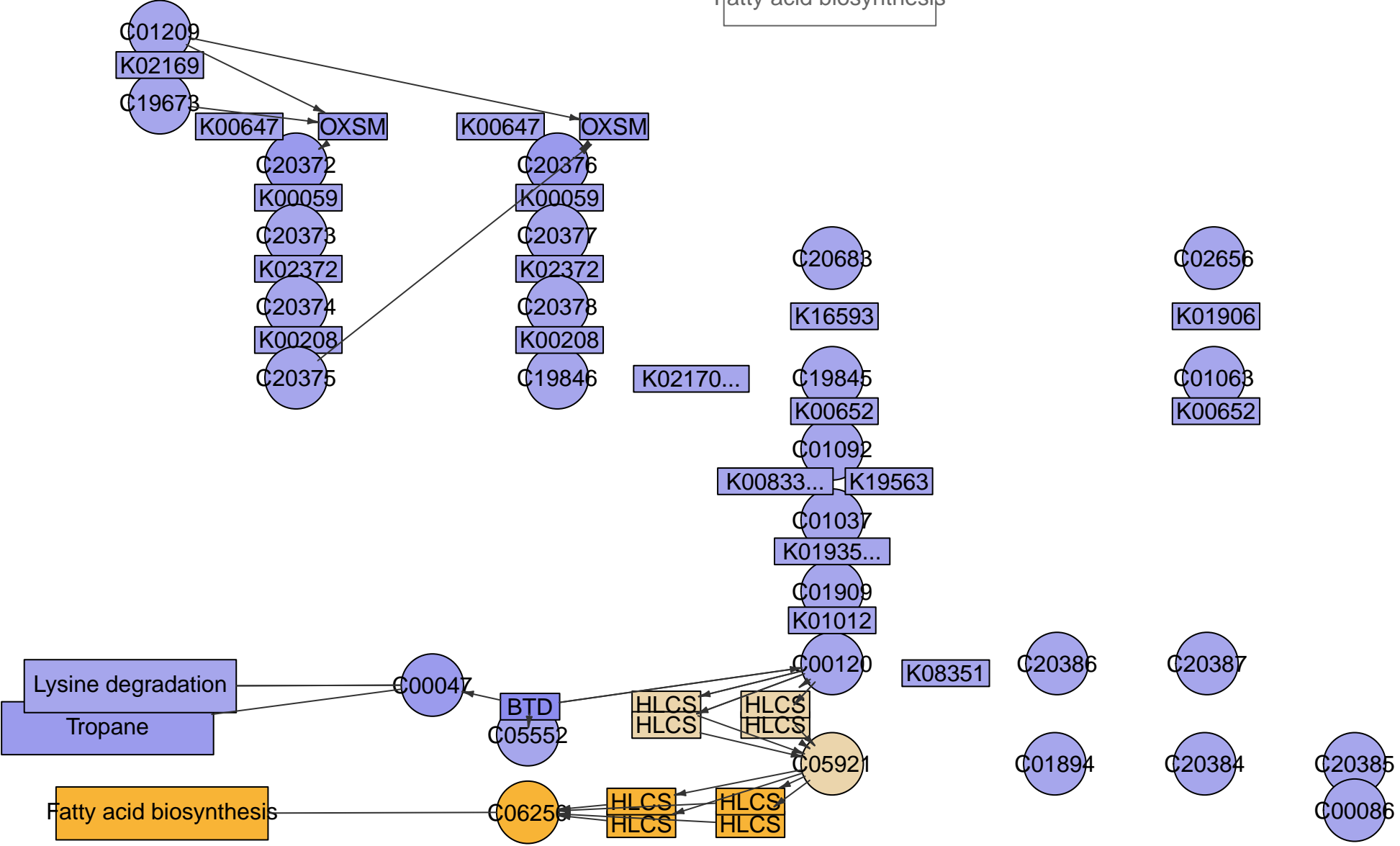
Biotin metabolism  
MPI-069

Fatty acid biosynthesis



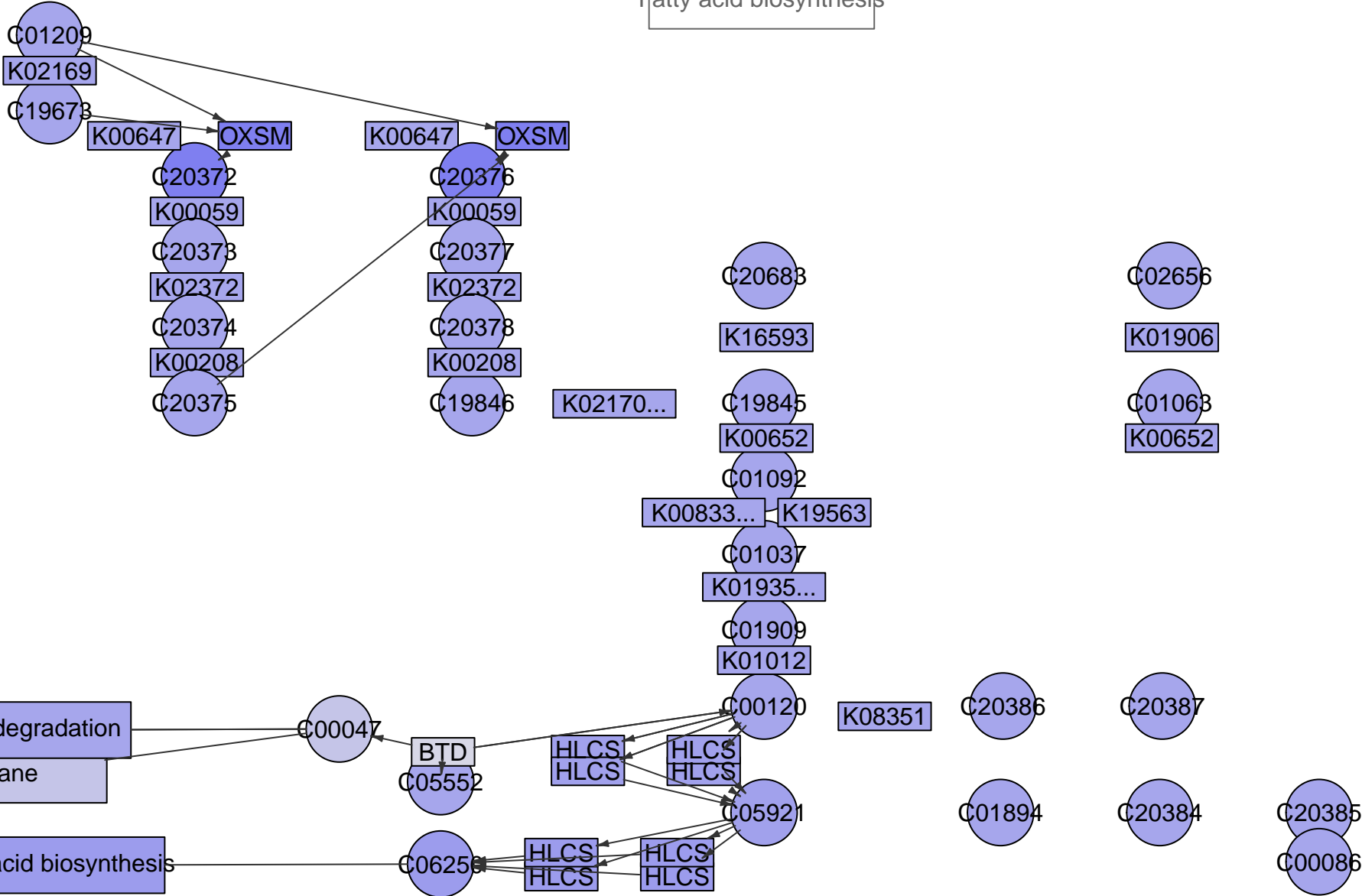
Biotin metabolism  
MPI-073

Fatty acid biosynthesis



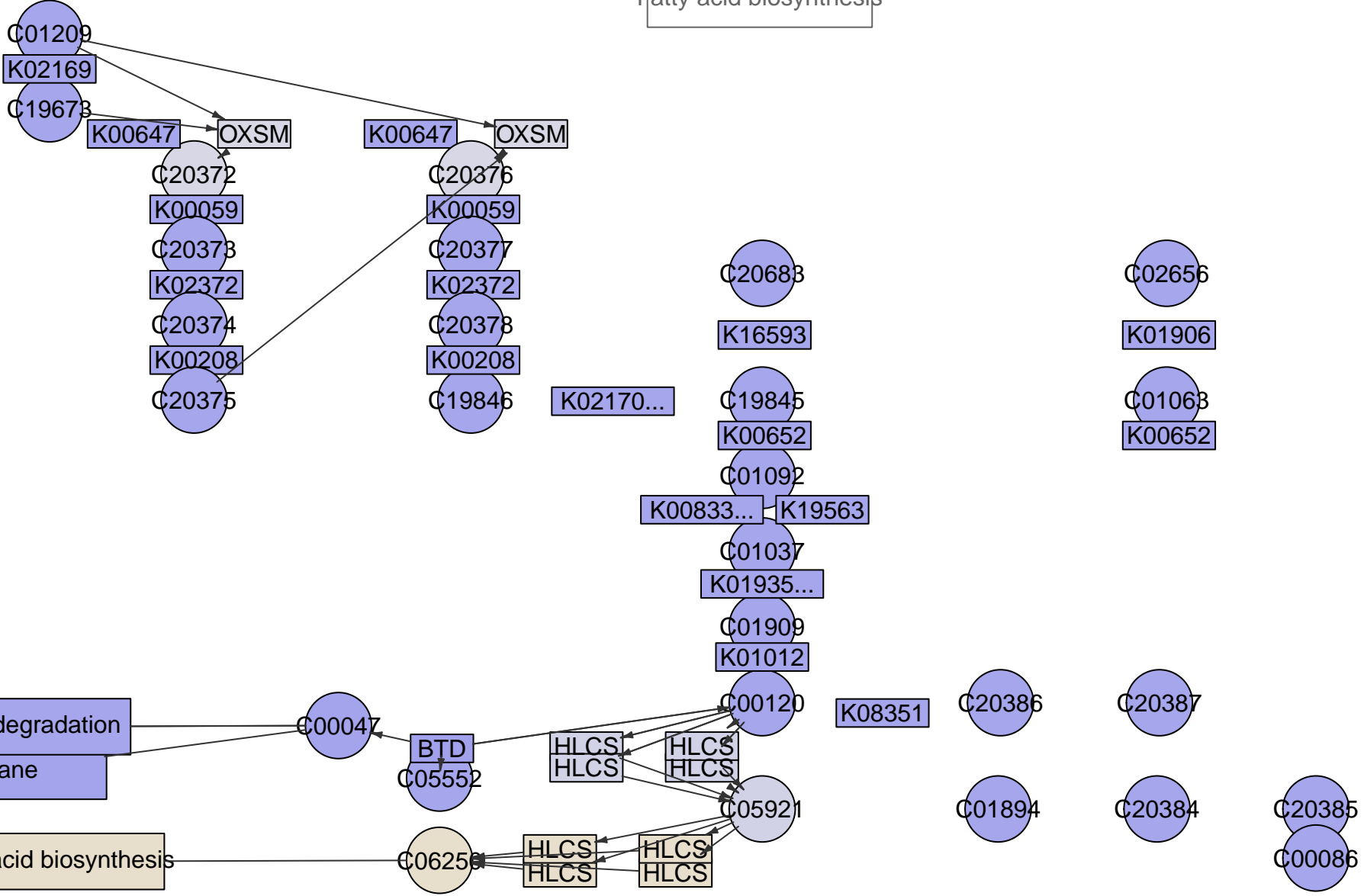
Biotin metabolism  
MPI-074

Fatty acid biosynthesis



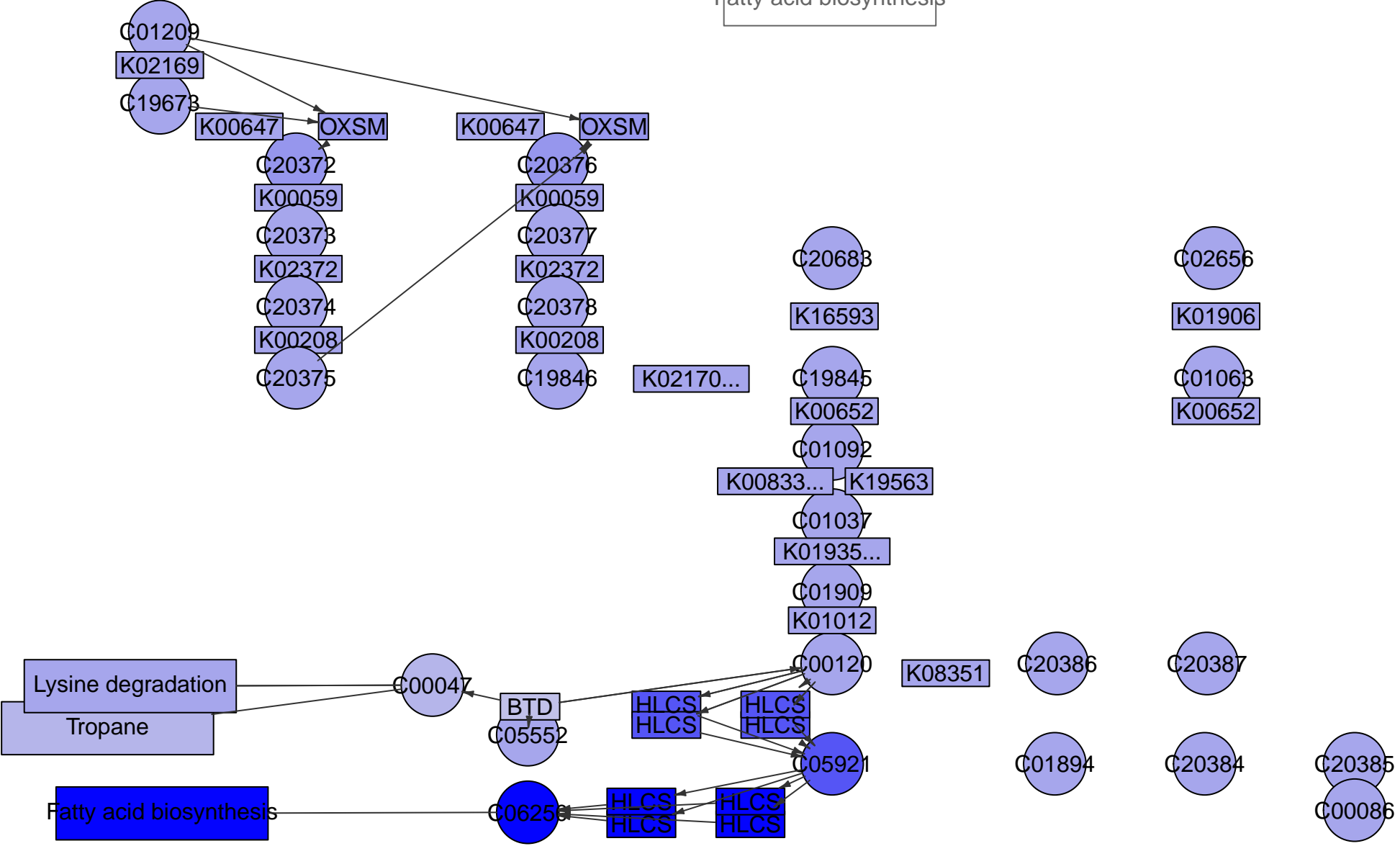
Biotin metabolism  
MPI-076

Fatty acid biosynthesis



Biotin metabolism  
MPI-083

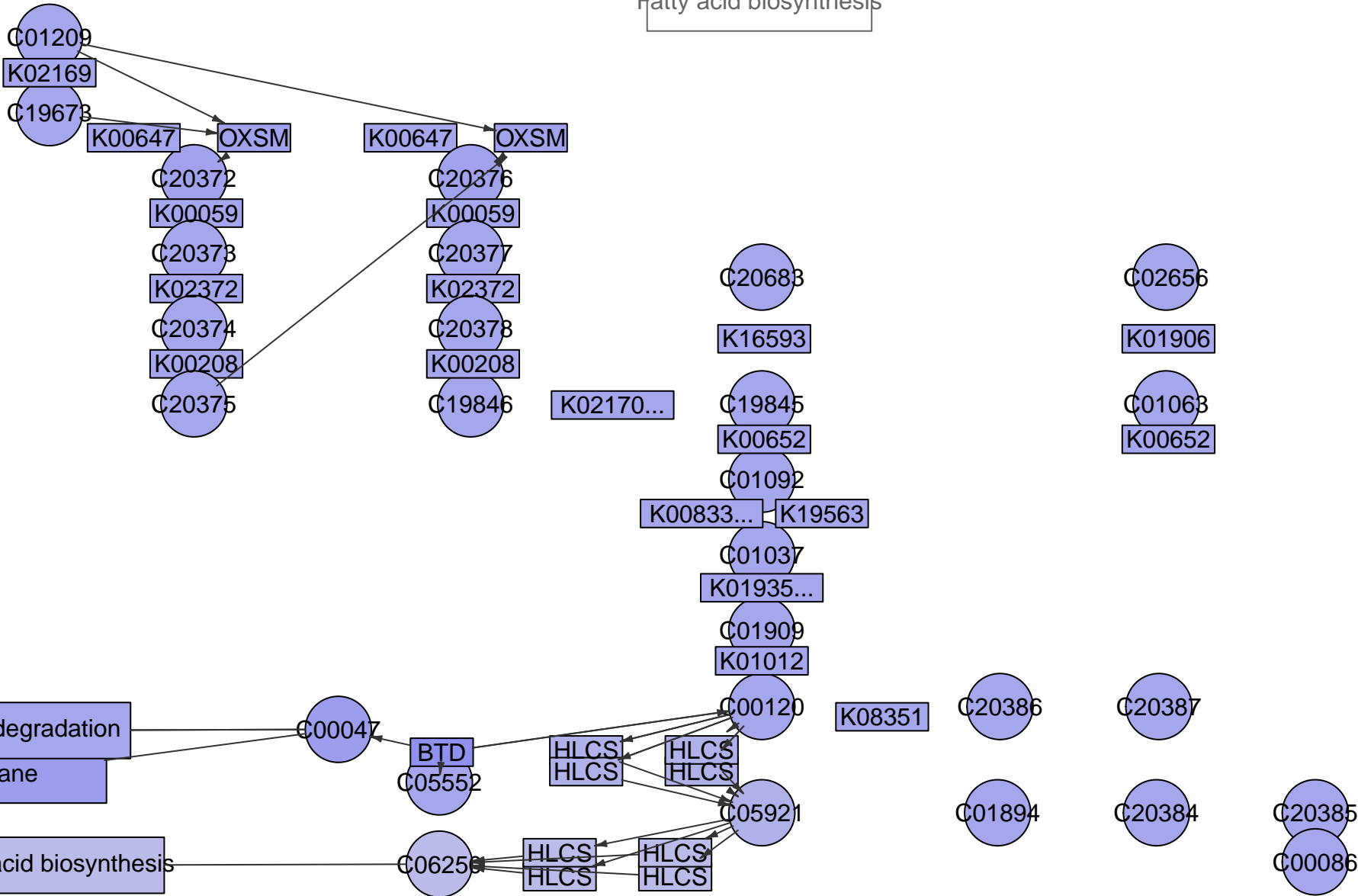
Fatty acid biosynthesis





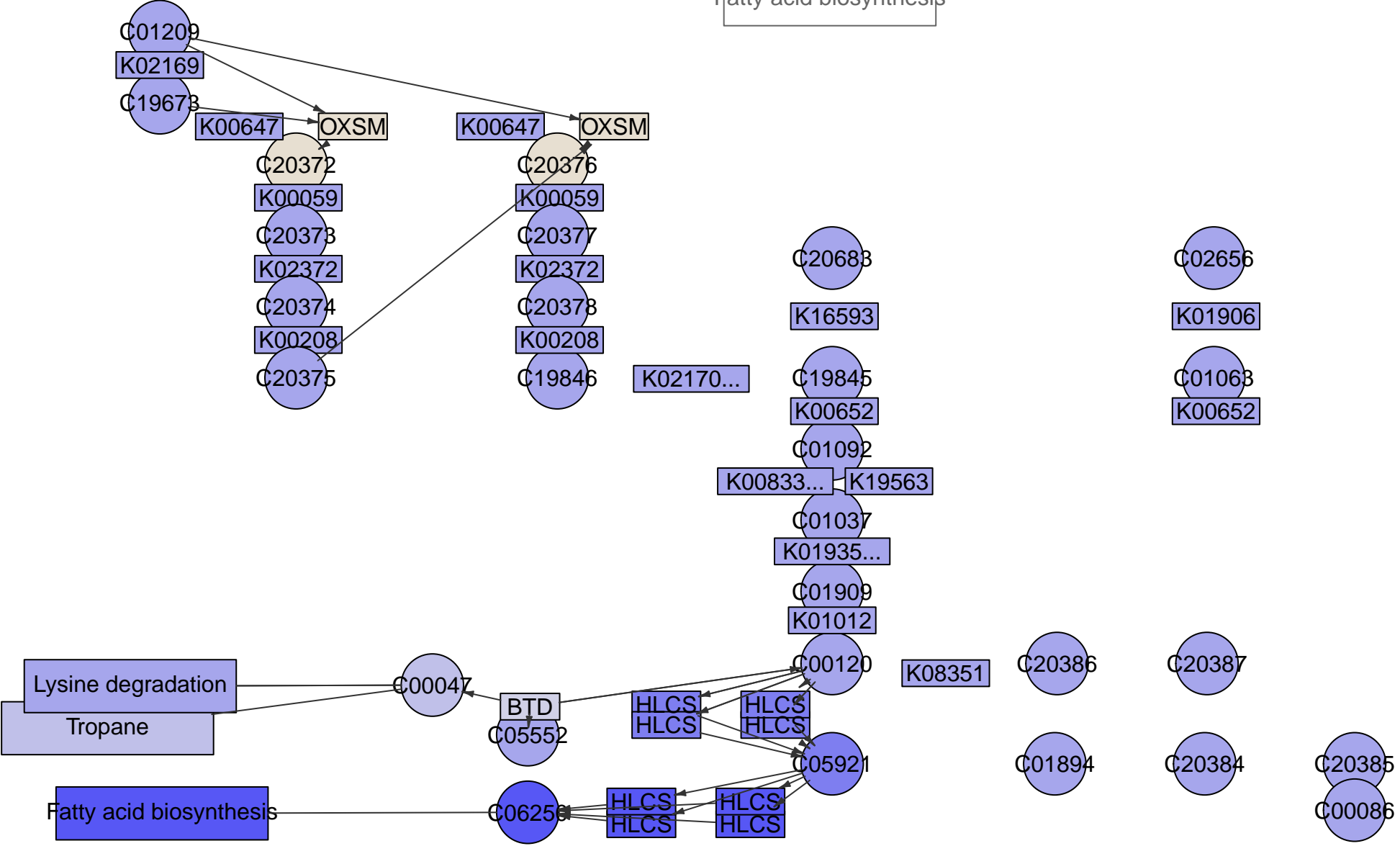
Biotin metabolism  
MPI-088

Fatty acid biosynthesis



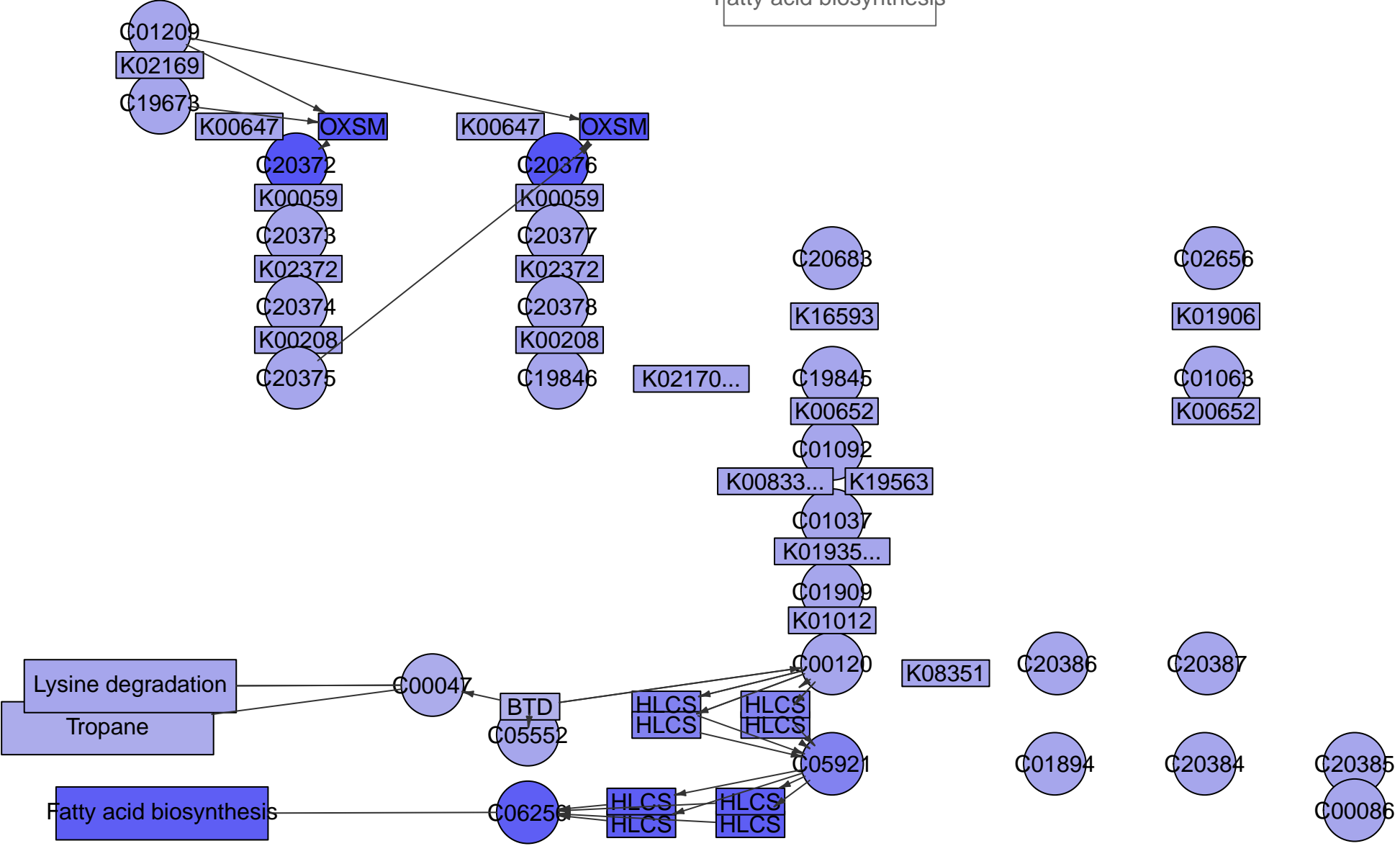
Biotin metabolism  
MPI-092

Fatty acid biosynthesis



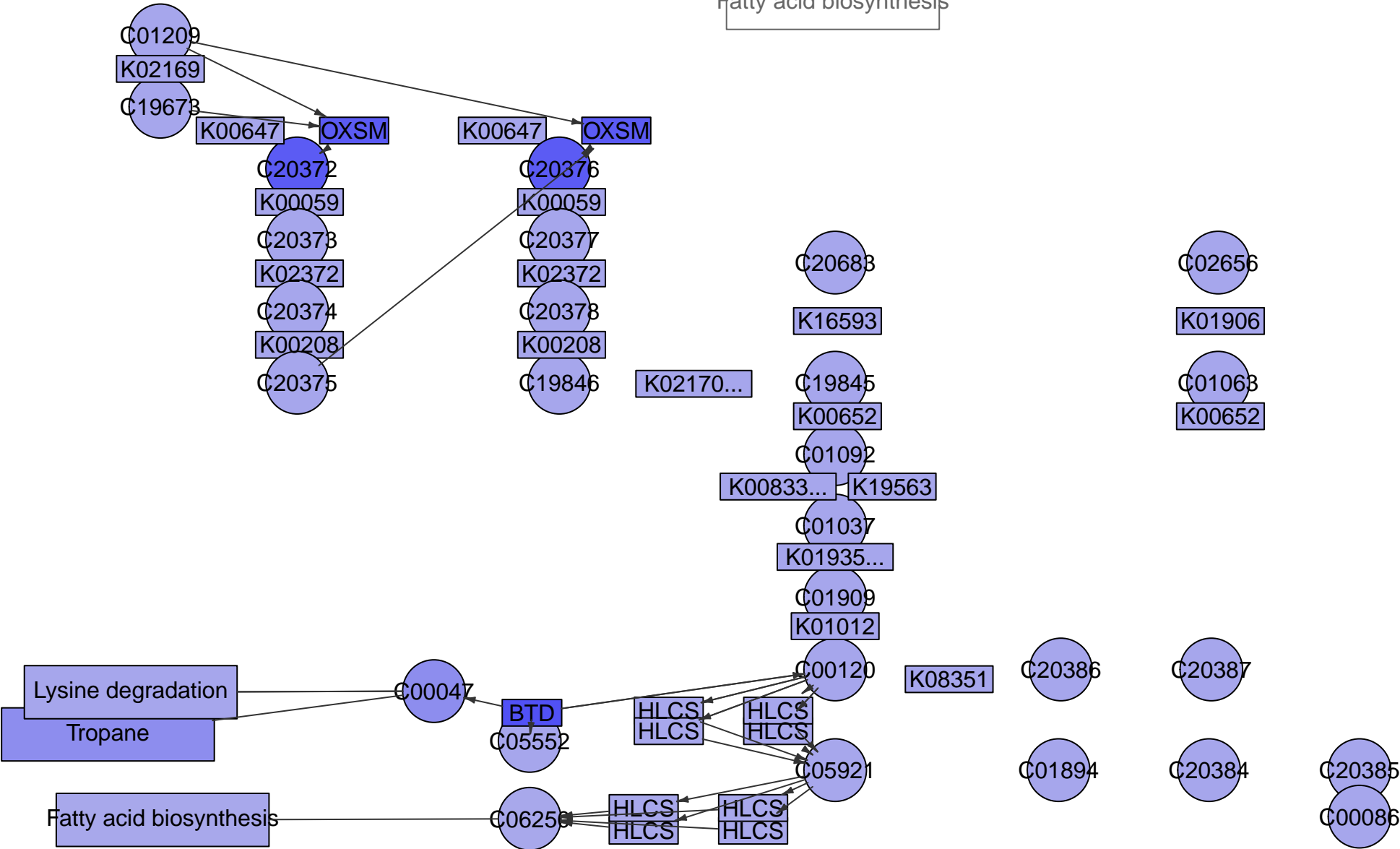
Biotin metabolism  
MPI-096

Fatty acid biosynthesis



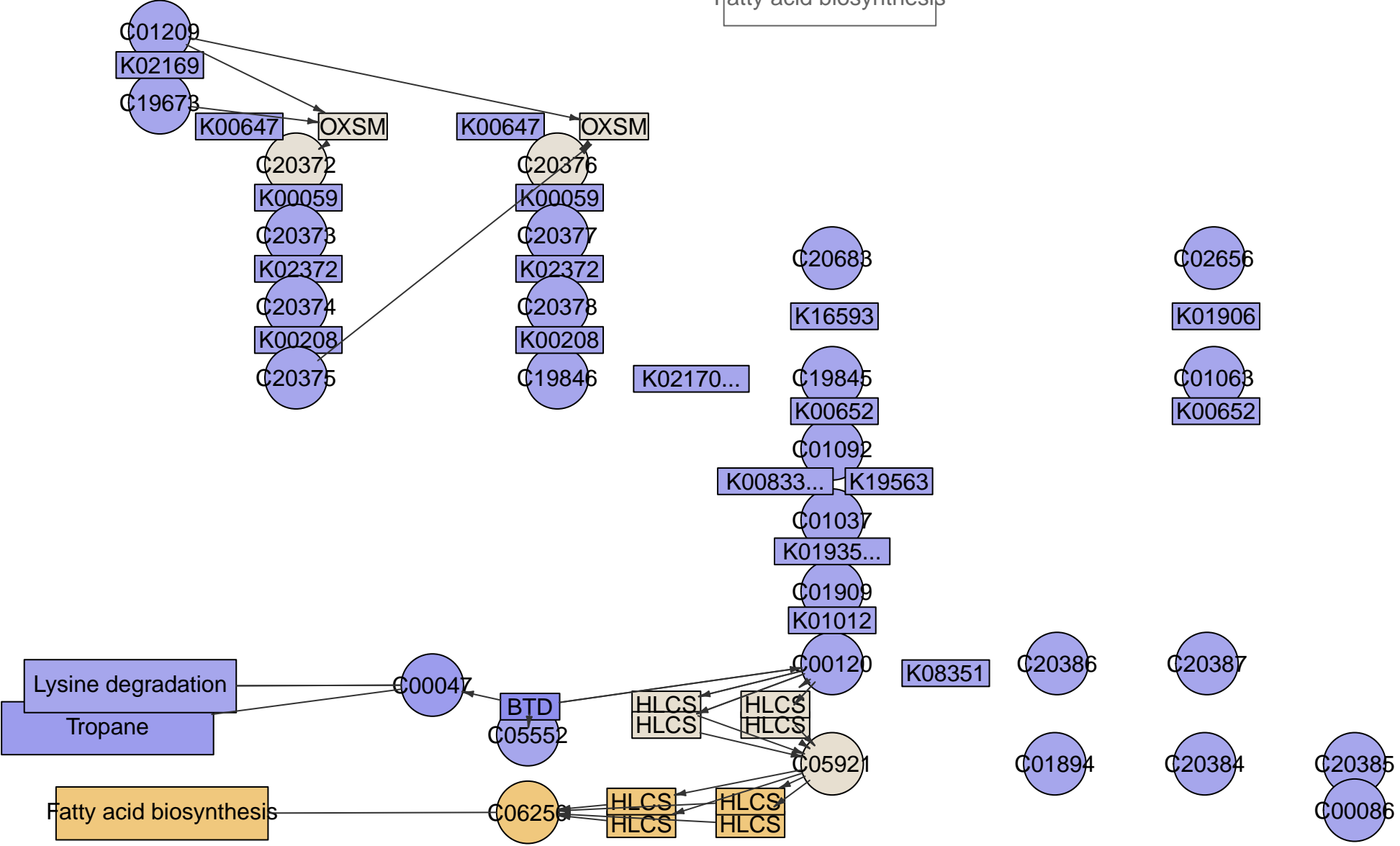
Biotin metabolism  
MPI-098

Fatty acid biosynthesis



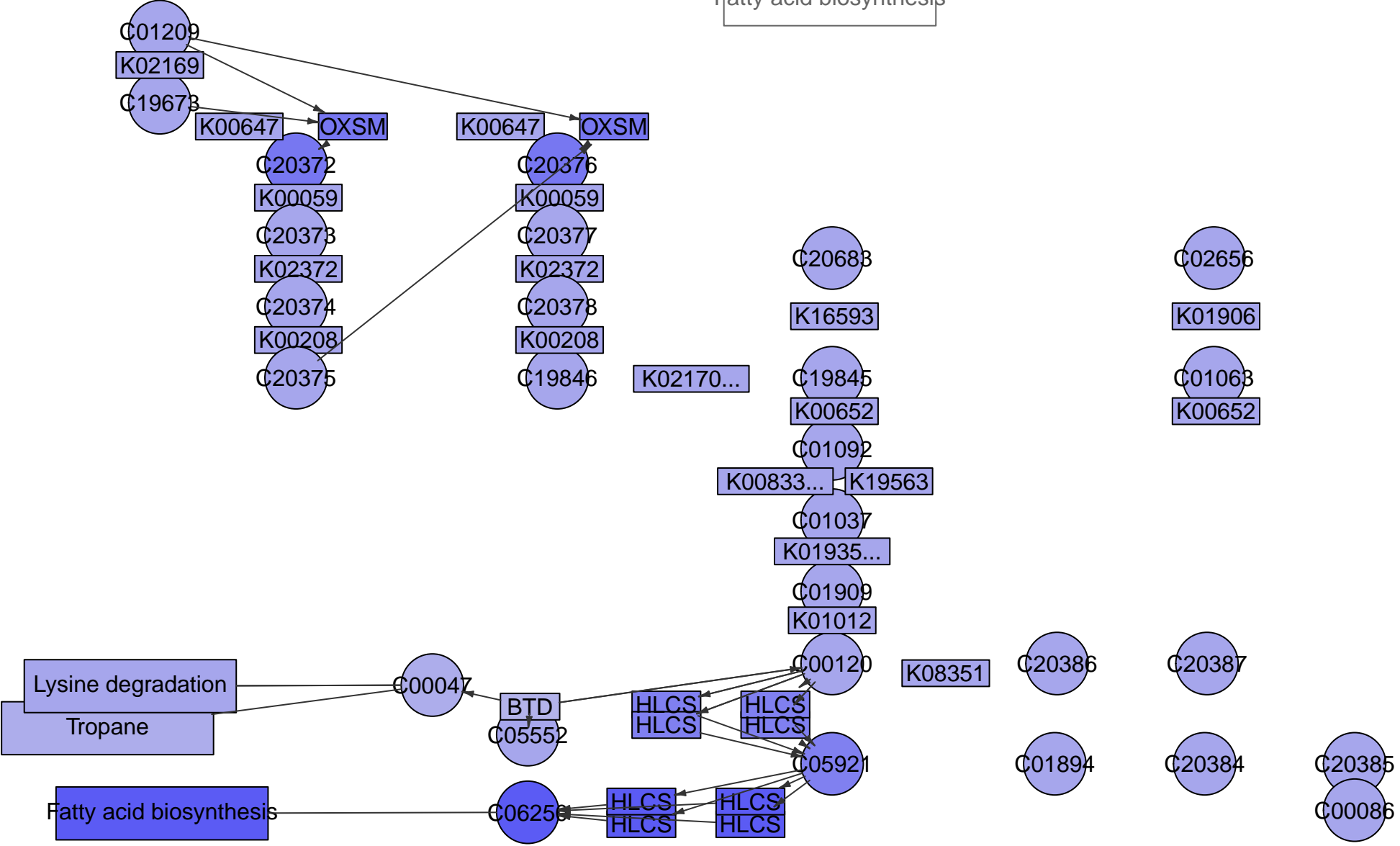
Biotin metabolism  
MPI-100

Fatty acid biosynthesis



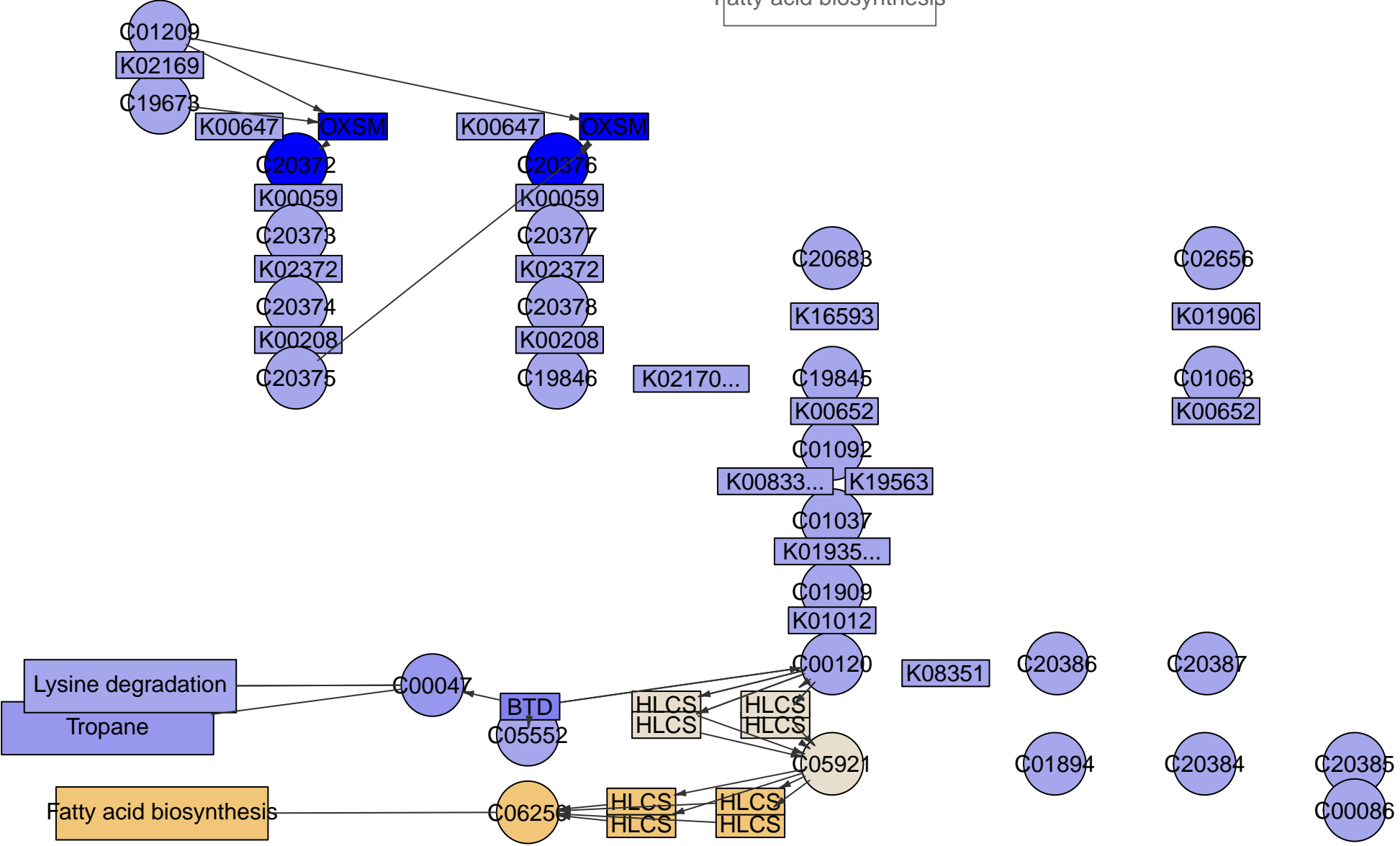
Biotin metabolism  
MPI-105

Fatty acid biosynthesis



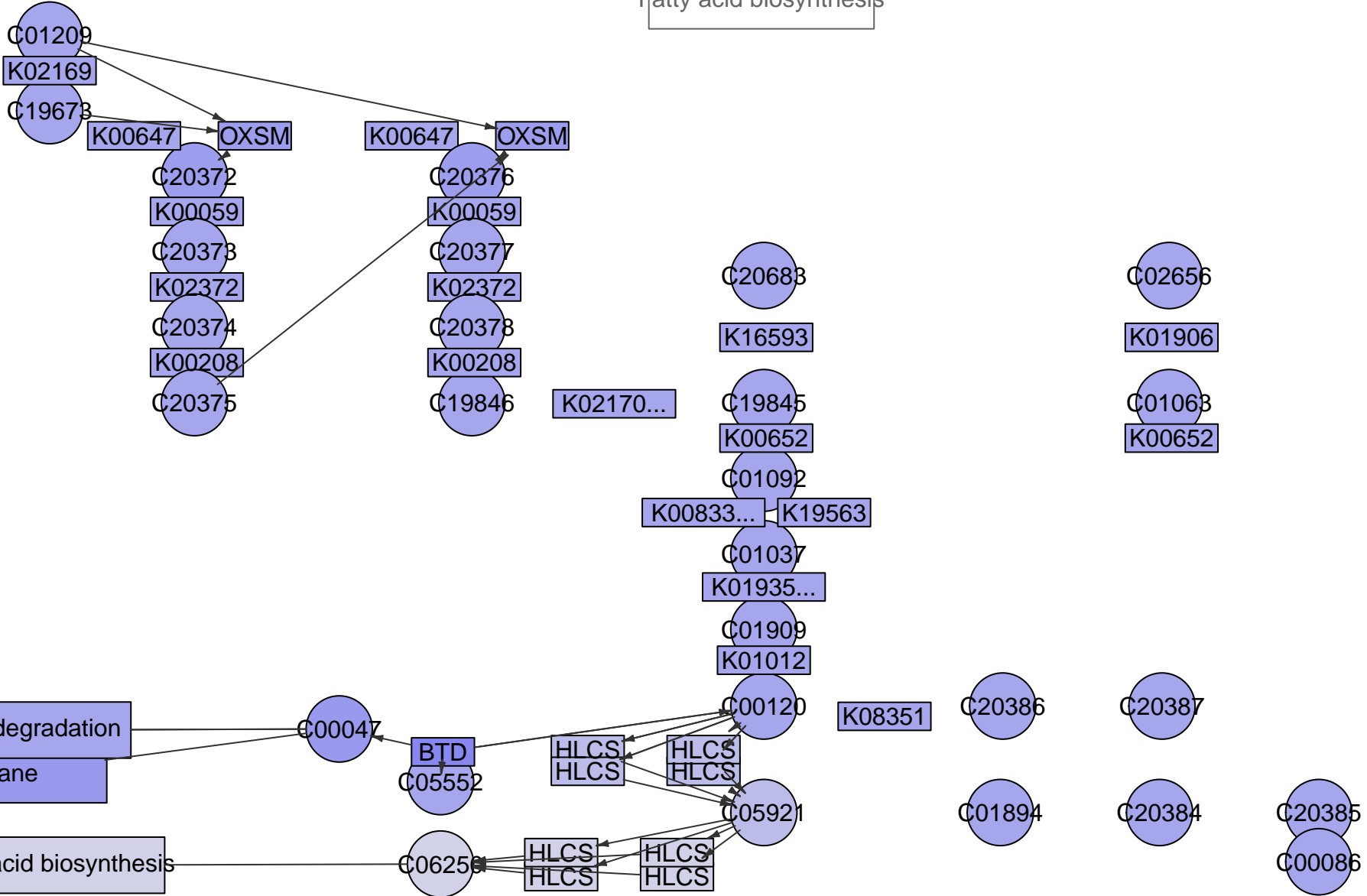
Biotin metabolism  
MPI-106

Fatty acid biosynthesis



Biotin metabolism  
MPI-108

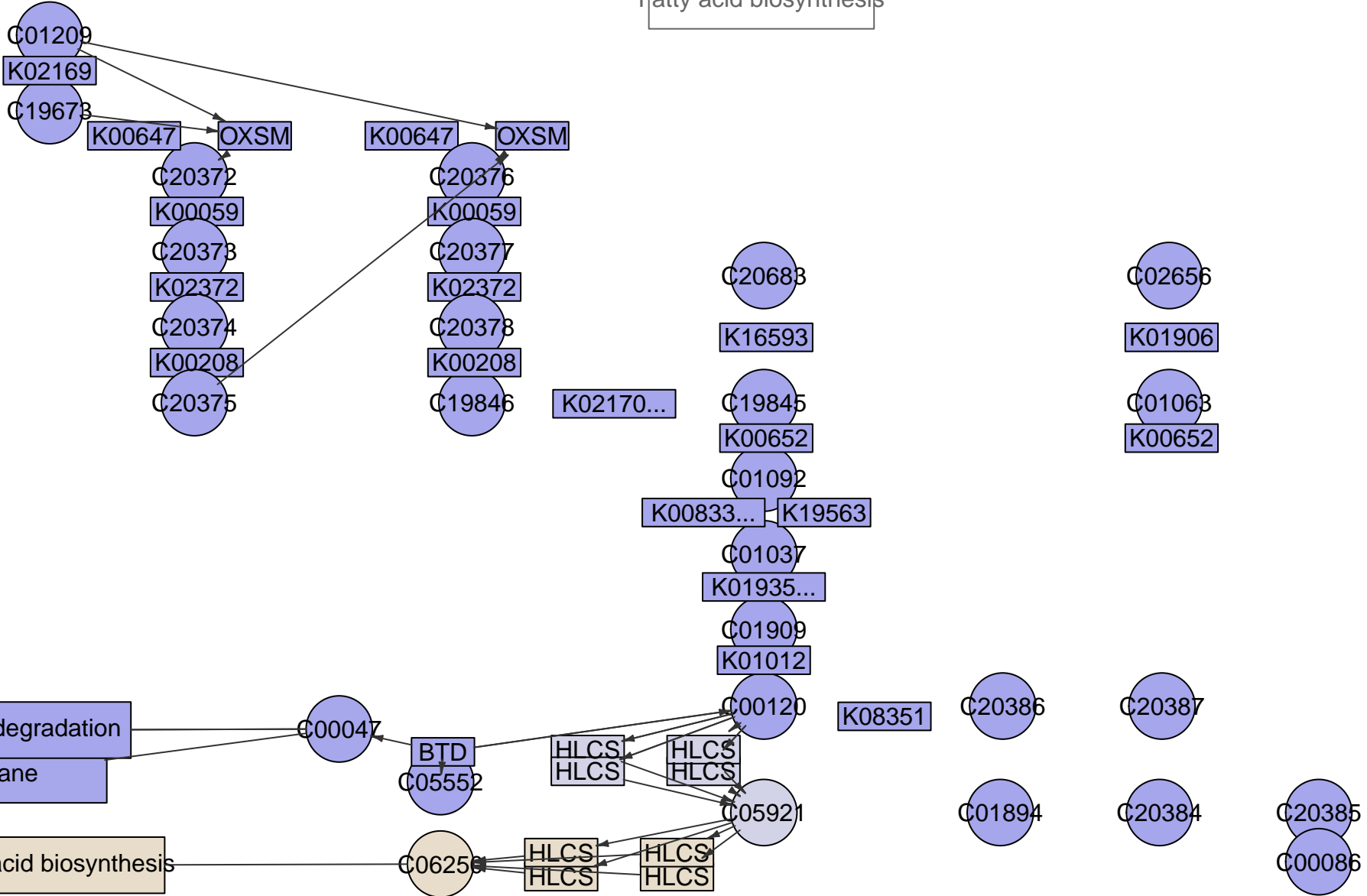
Fatty acid biosynthesis





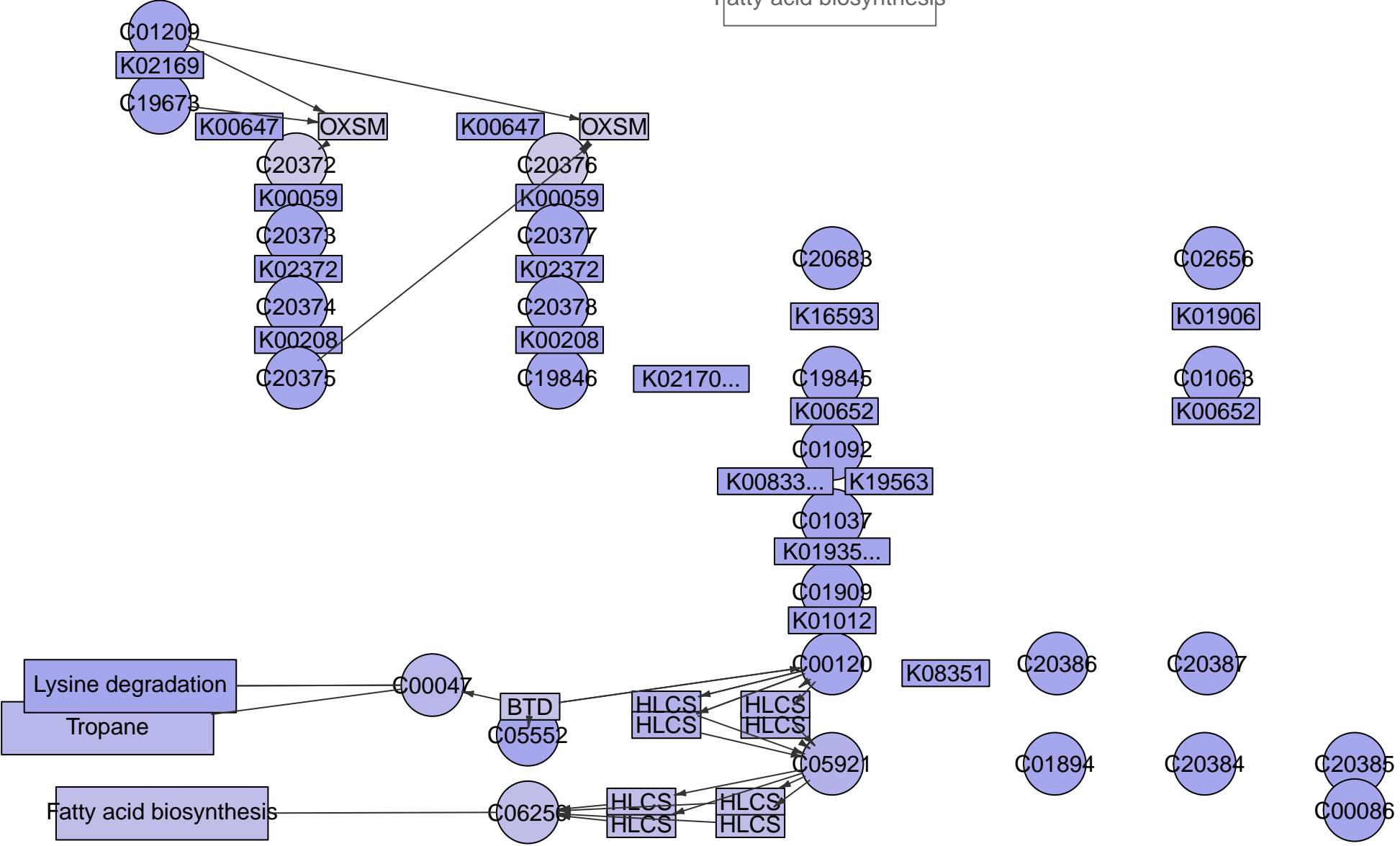
Biotin metabolism  
MPI-109

Fatty acid biosynthesis



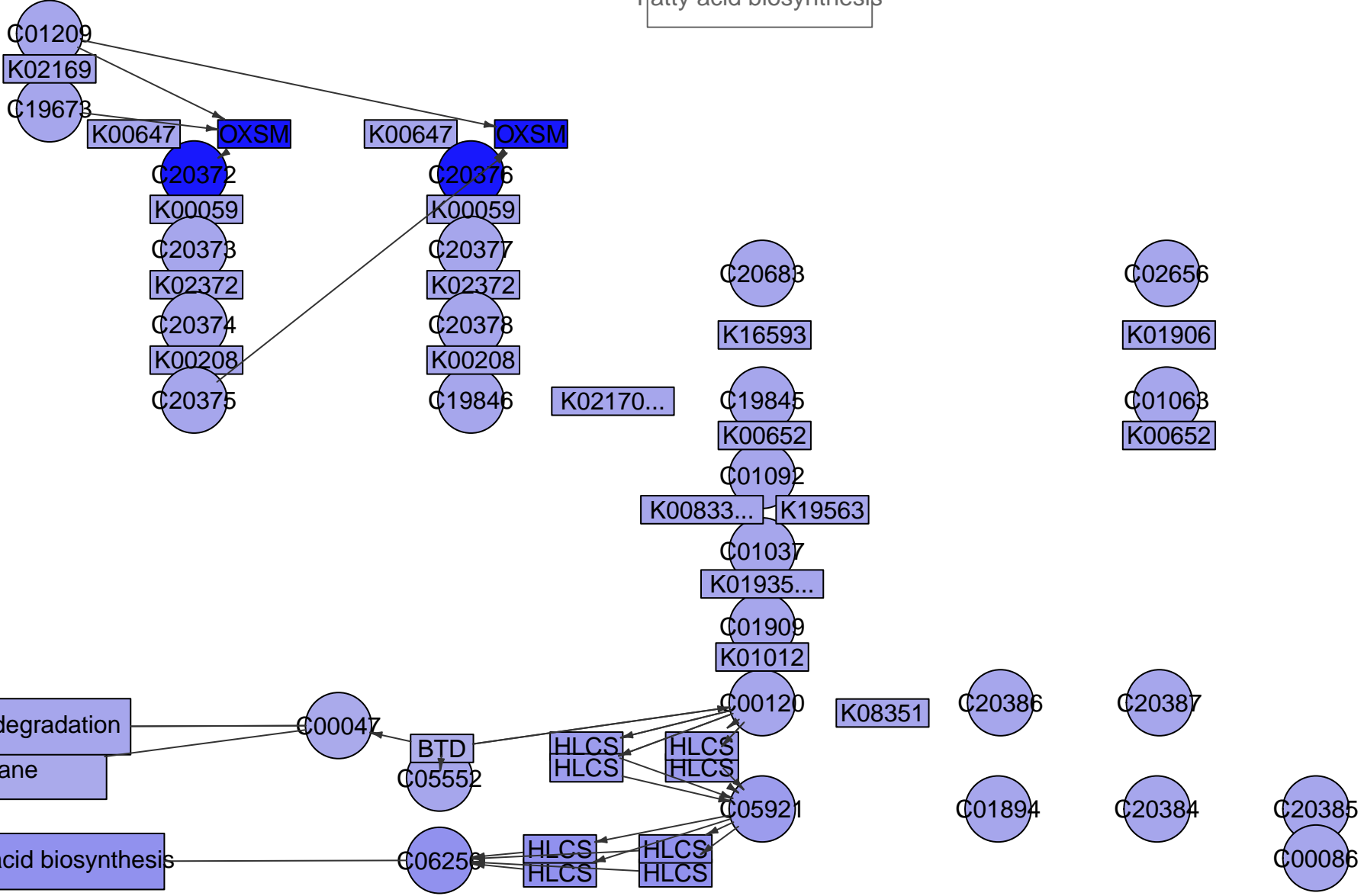
Biotin metabolism  
MPI-110

Fatty acid biosynthesis



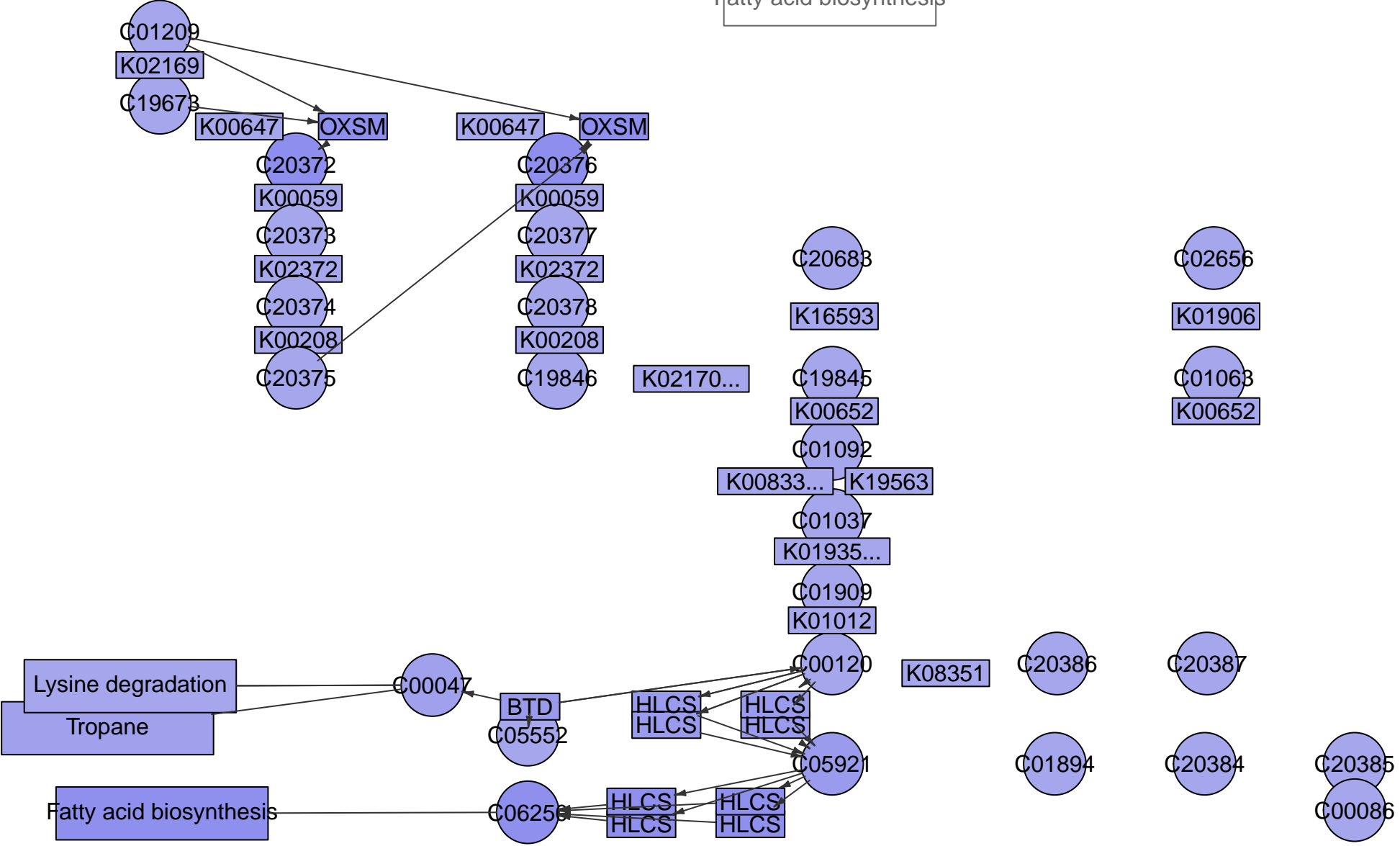
Biotin metabolism  
MPI-111

Fatty acid biosynthesis



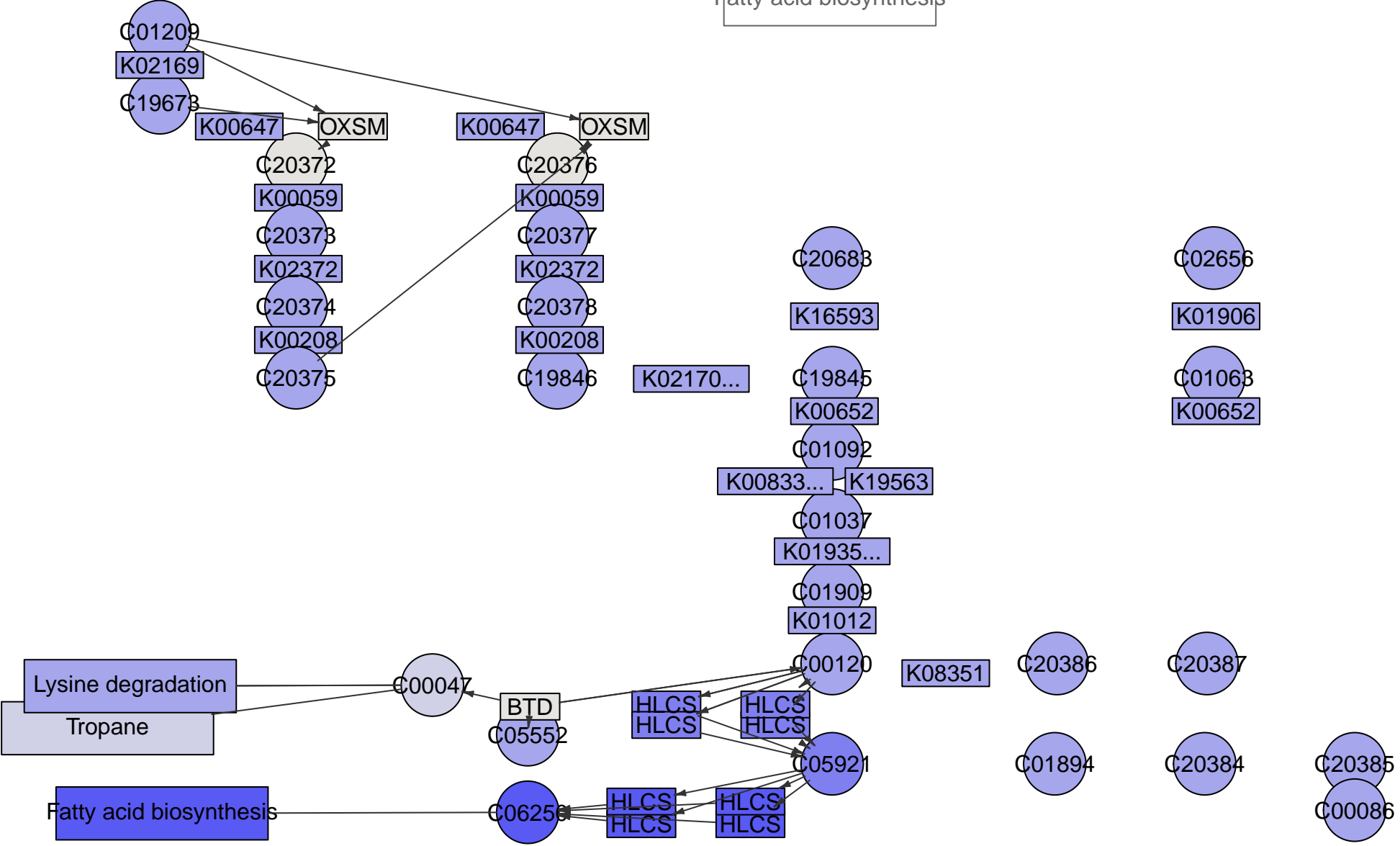
Biotin metabolism  
MPI-113

Fatty acid biosynthesis



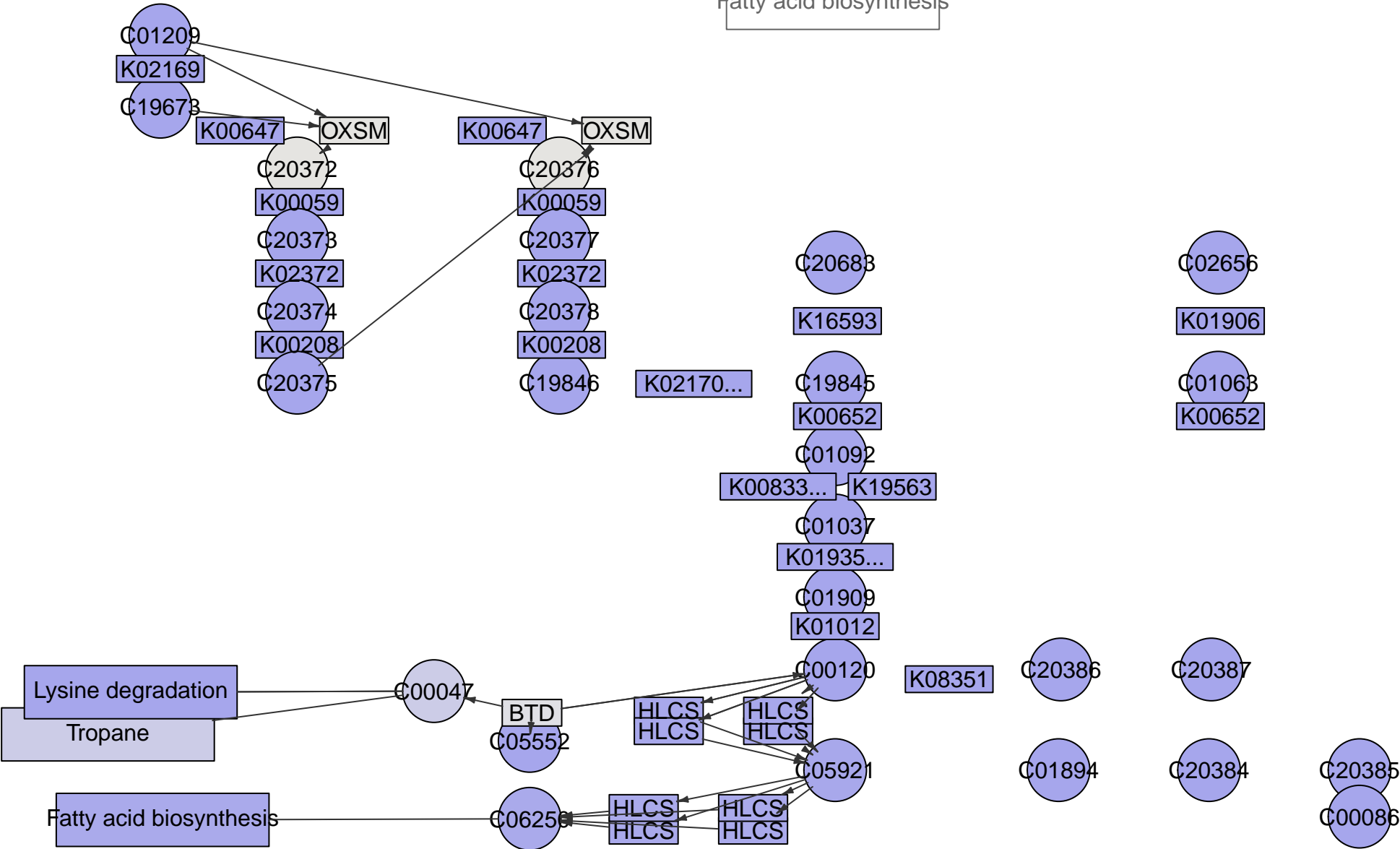
Biotin metabolism  
MPI-115

Fatty acid biosynthesis



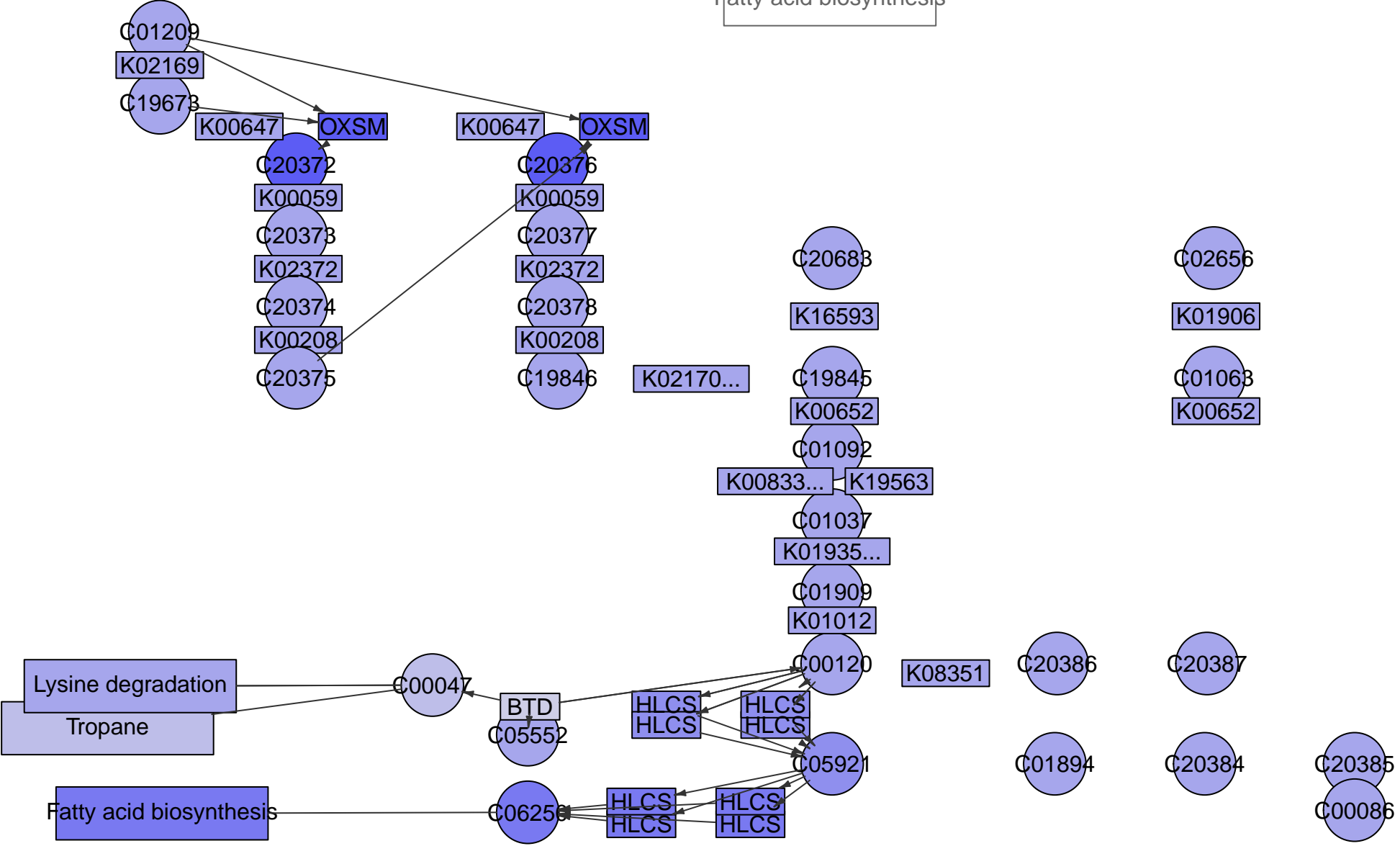
Biotin metabolism  
MPI-118

Fatty acid biosynthesis



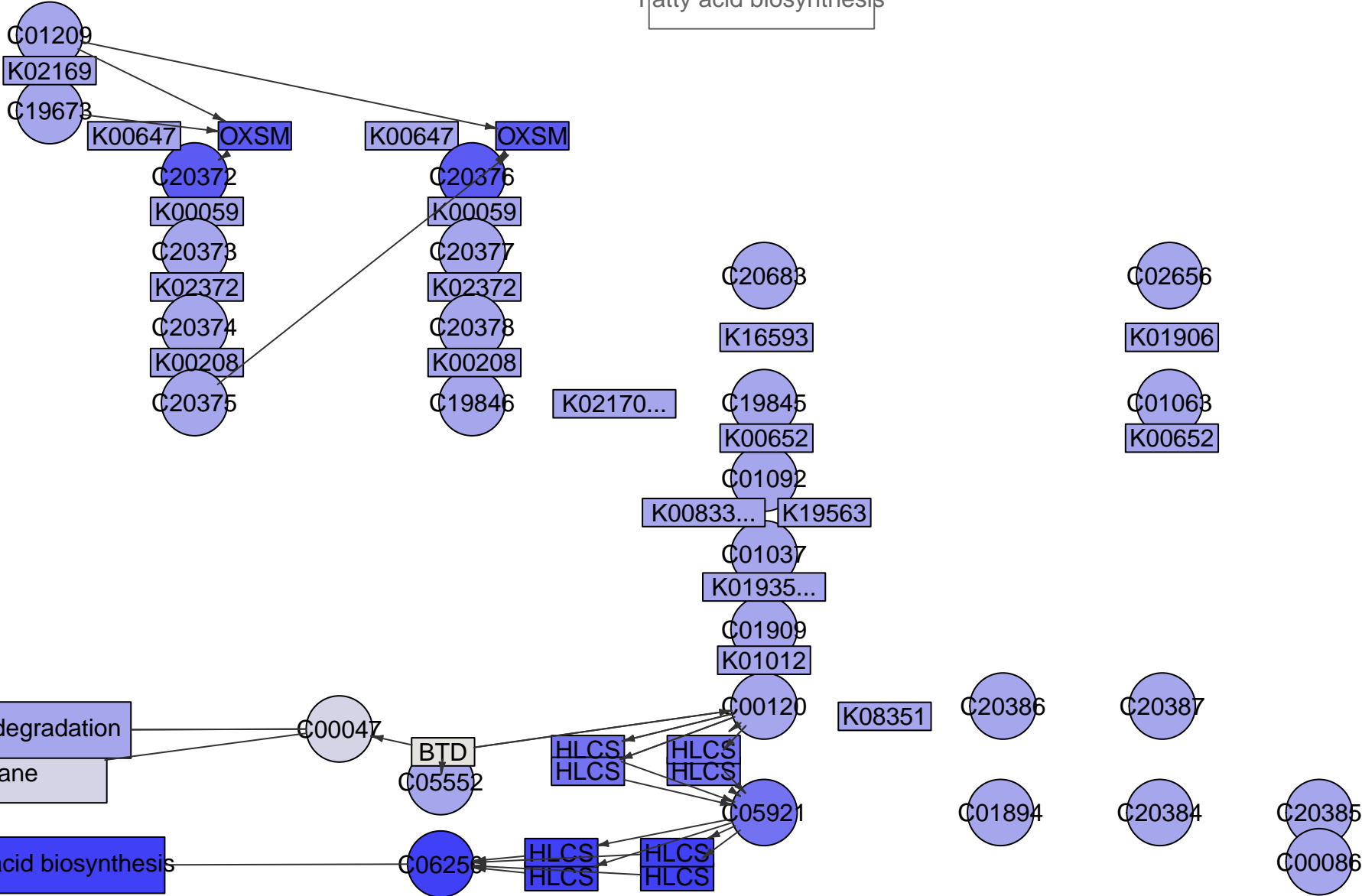
Biotin metabolism  
MPI-119

Fatty acid biosynthesis



Biotin metabolism  
MPI-122

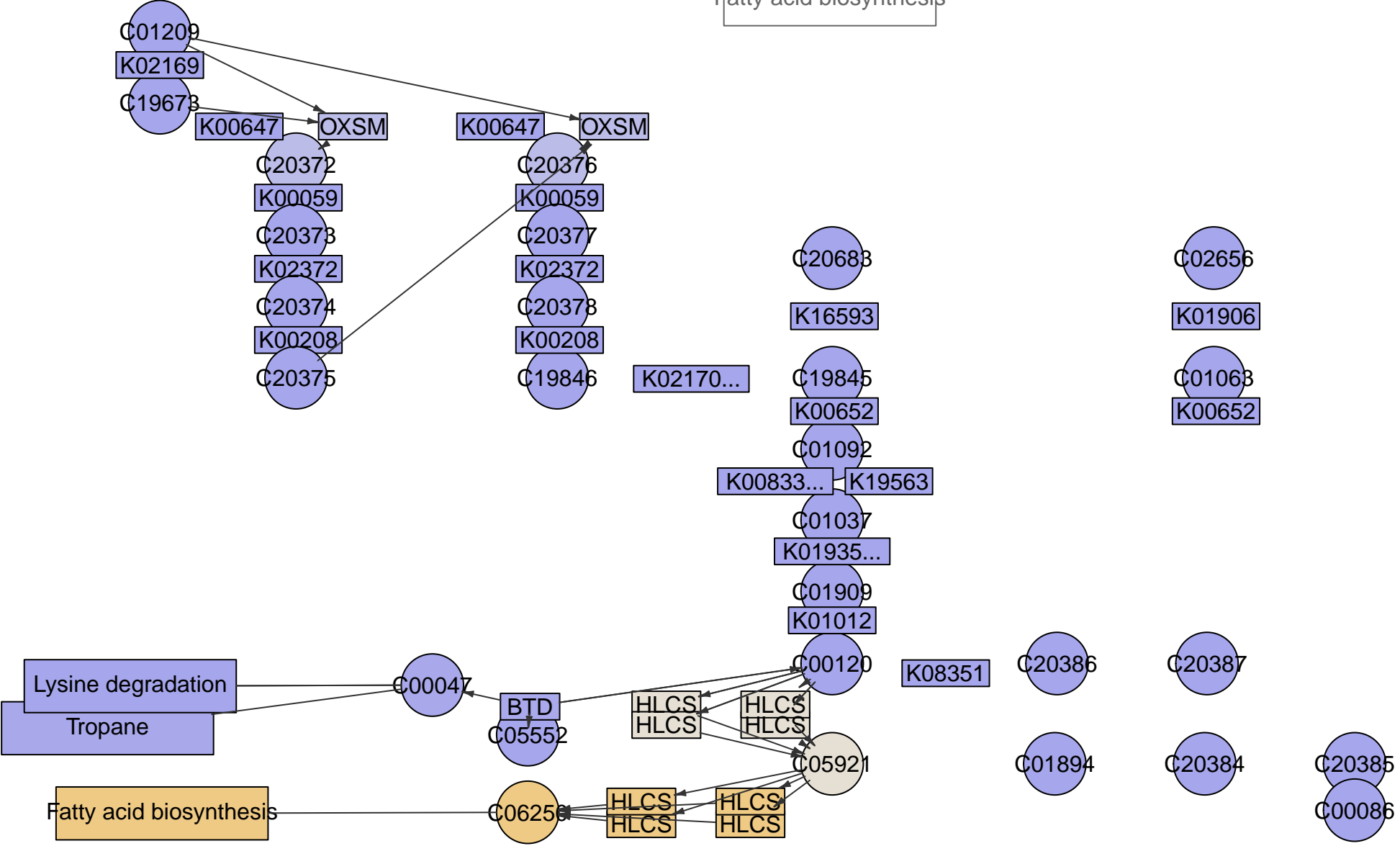
Fatty acid biosynthesis





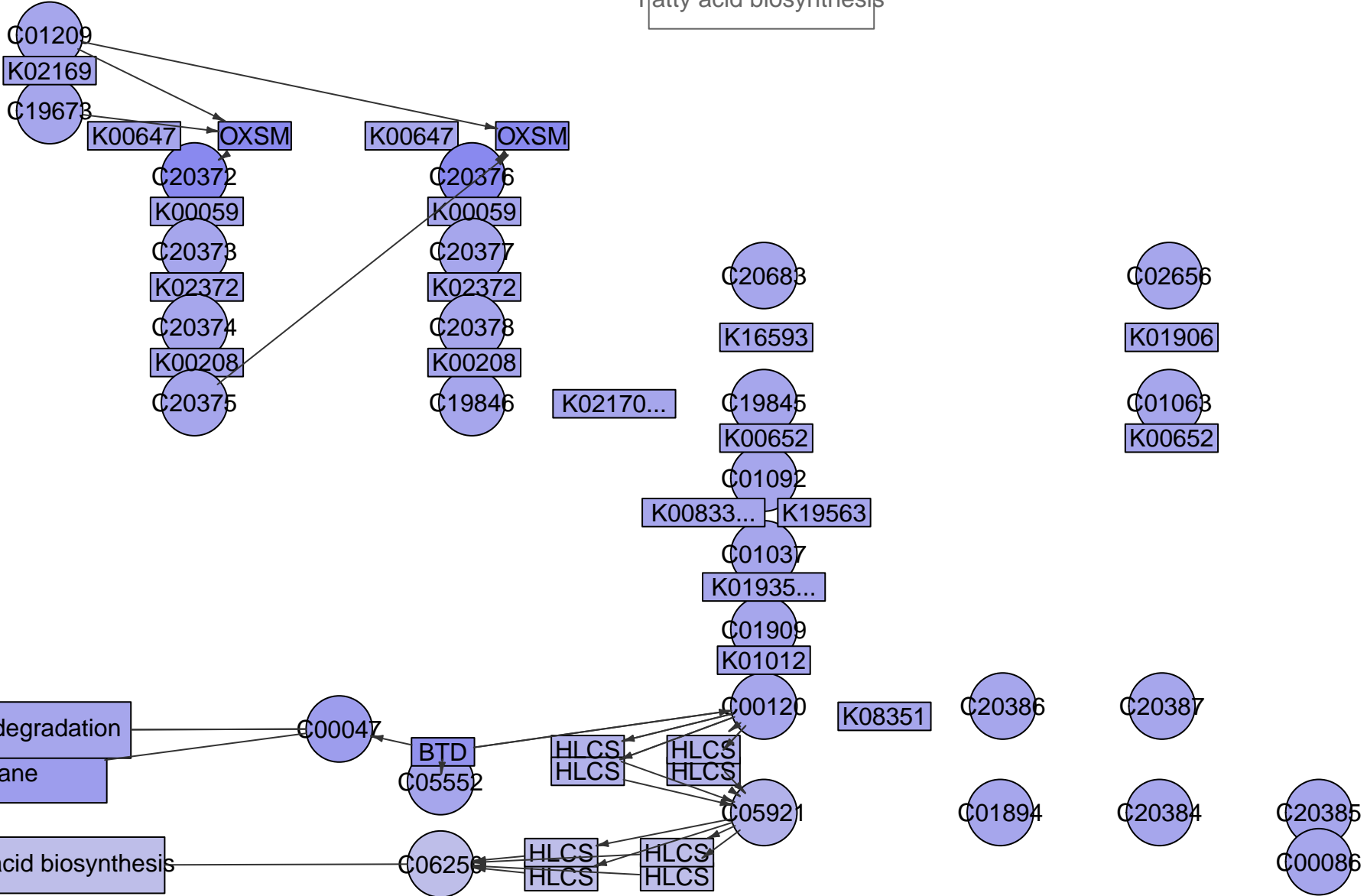
Biotin metabolism  
MPI-127

Fatty acid biosynthesis



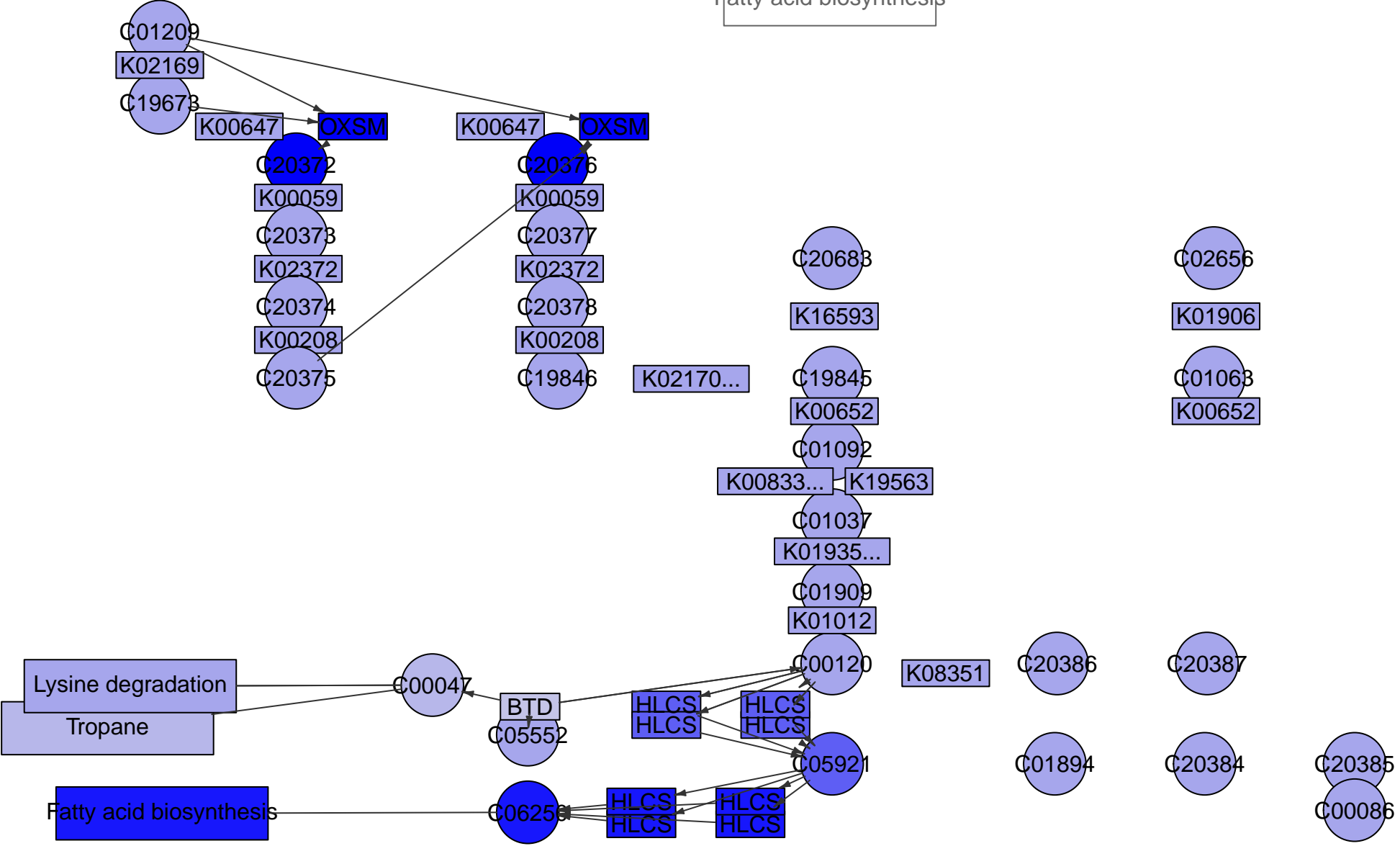
Biotin metabolism  
MPI-128

Fatty acid biosynthesis



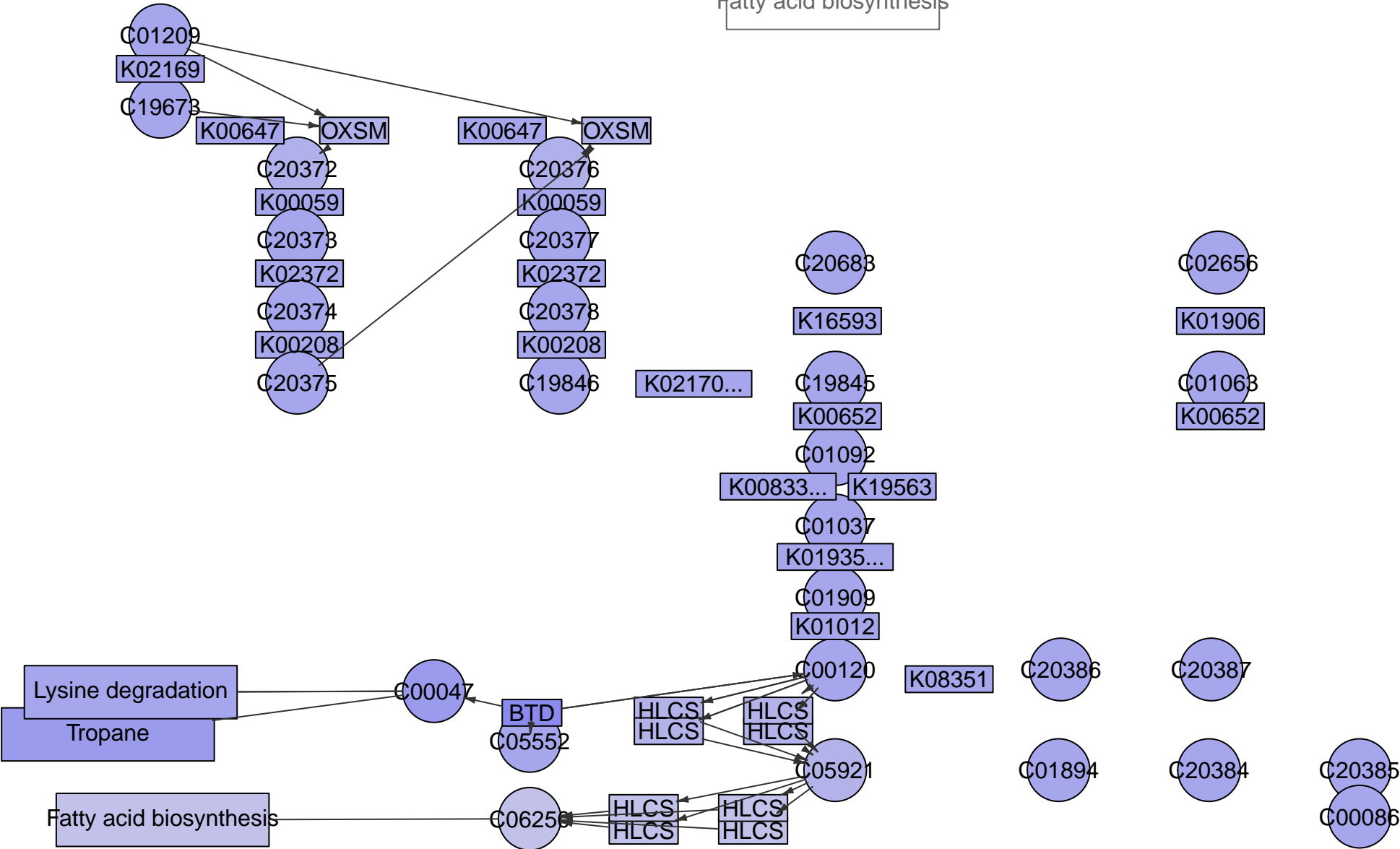
Biotin metabolism  
MPI-129

Fatty acid biosynthesis



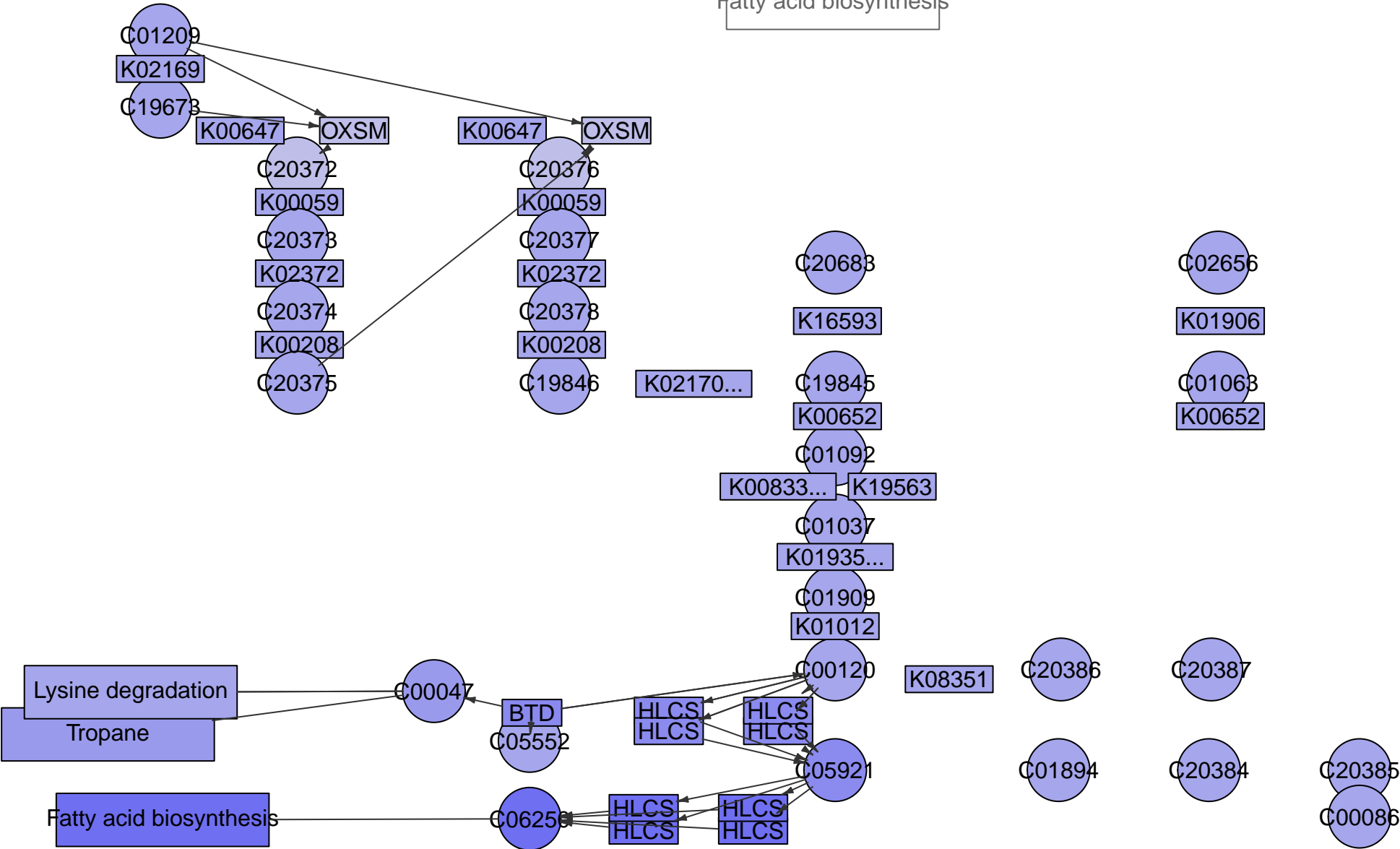
Biotin metabolism  
MPI-130

Fatty acid biosynthesis



Biotin metabolism  
MPI-132

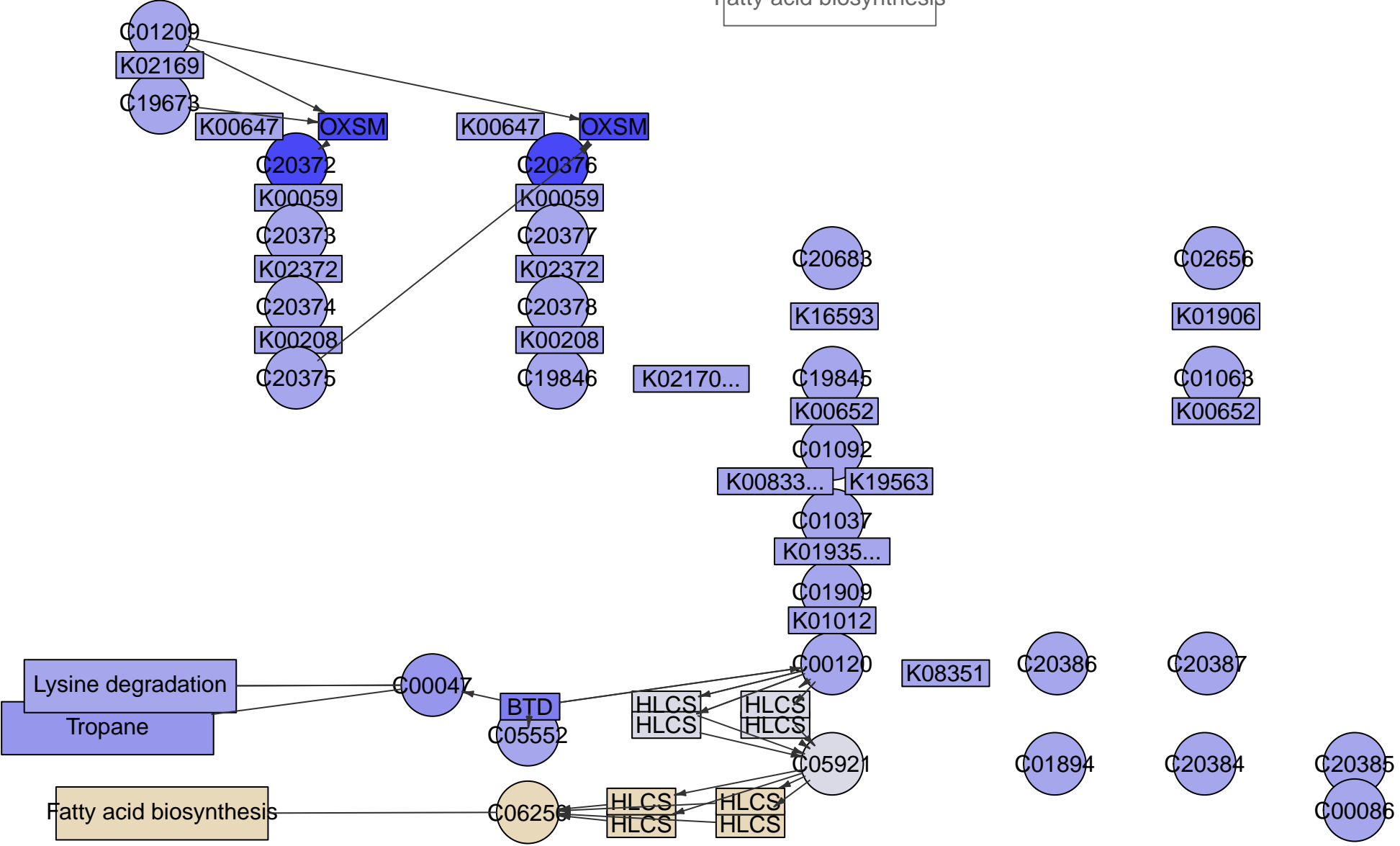
Fatty acid biosynthesis





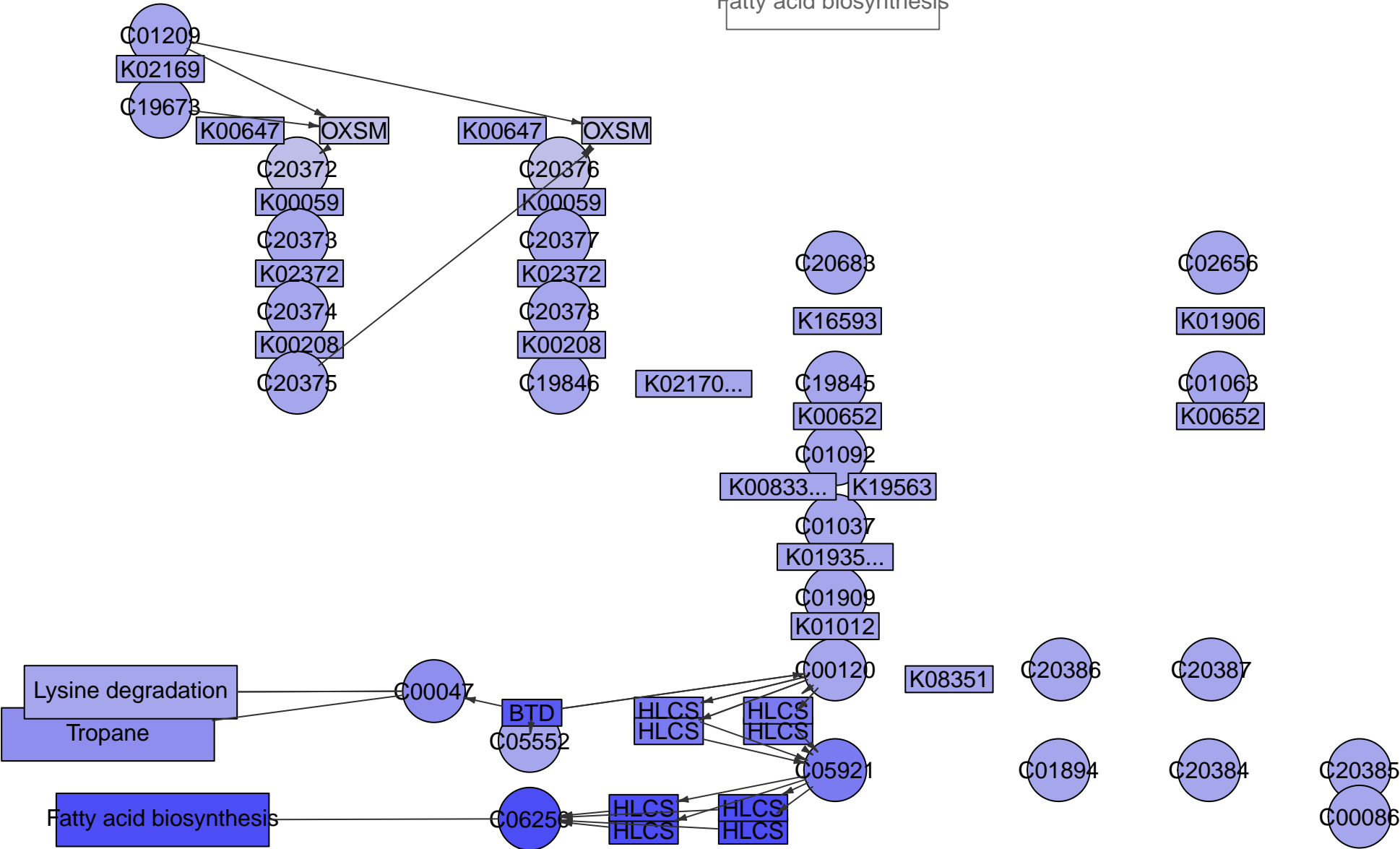
Biotin metabolism  
MPI-134

Fatty acid biosynthesis



Biotin metabolism  
MPI-135

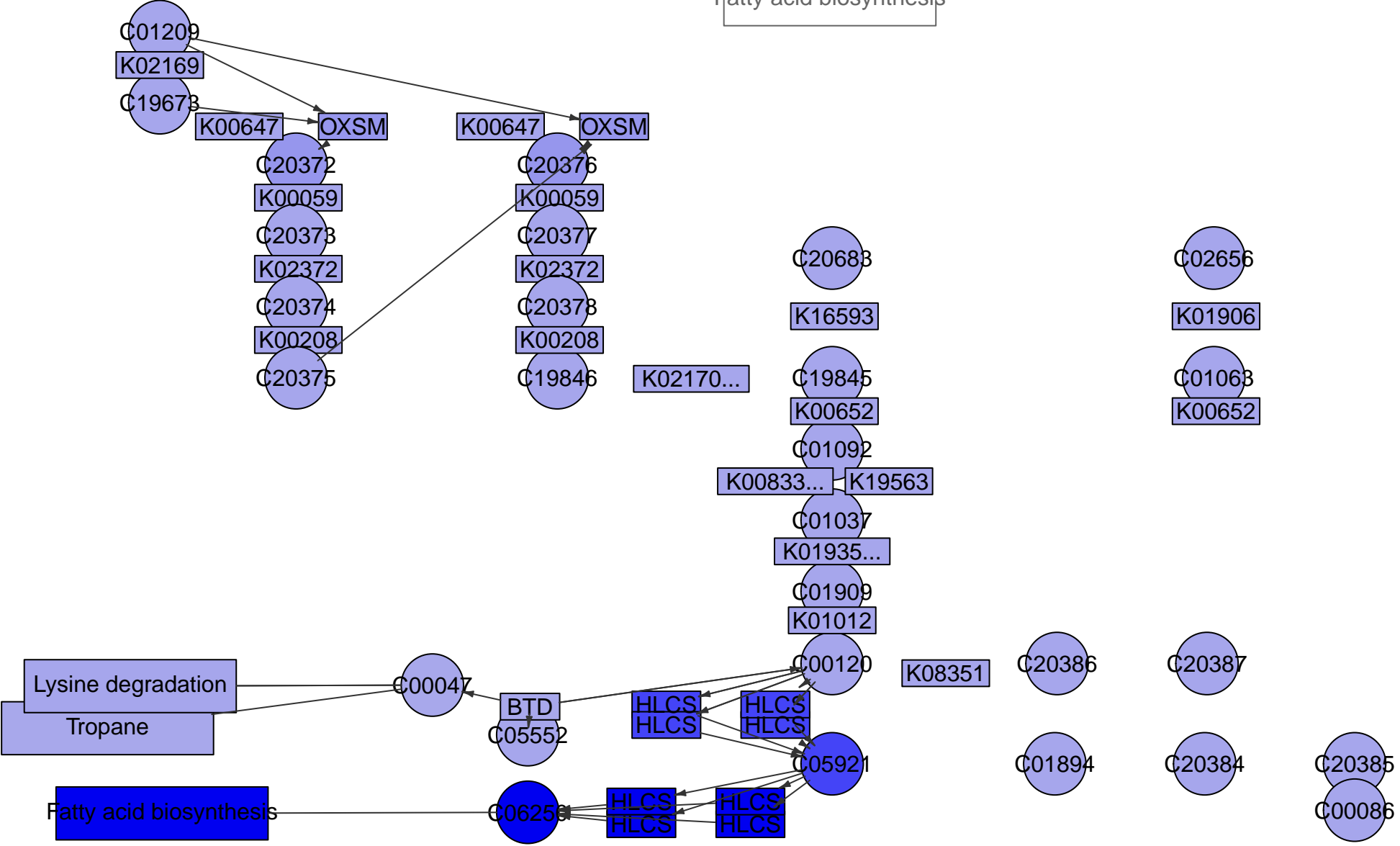
Fatty acid biosynthesis





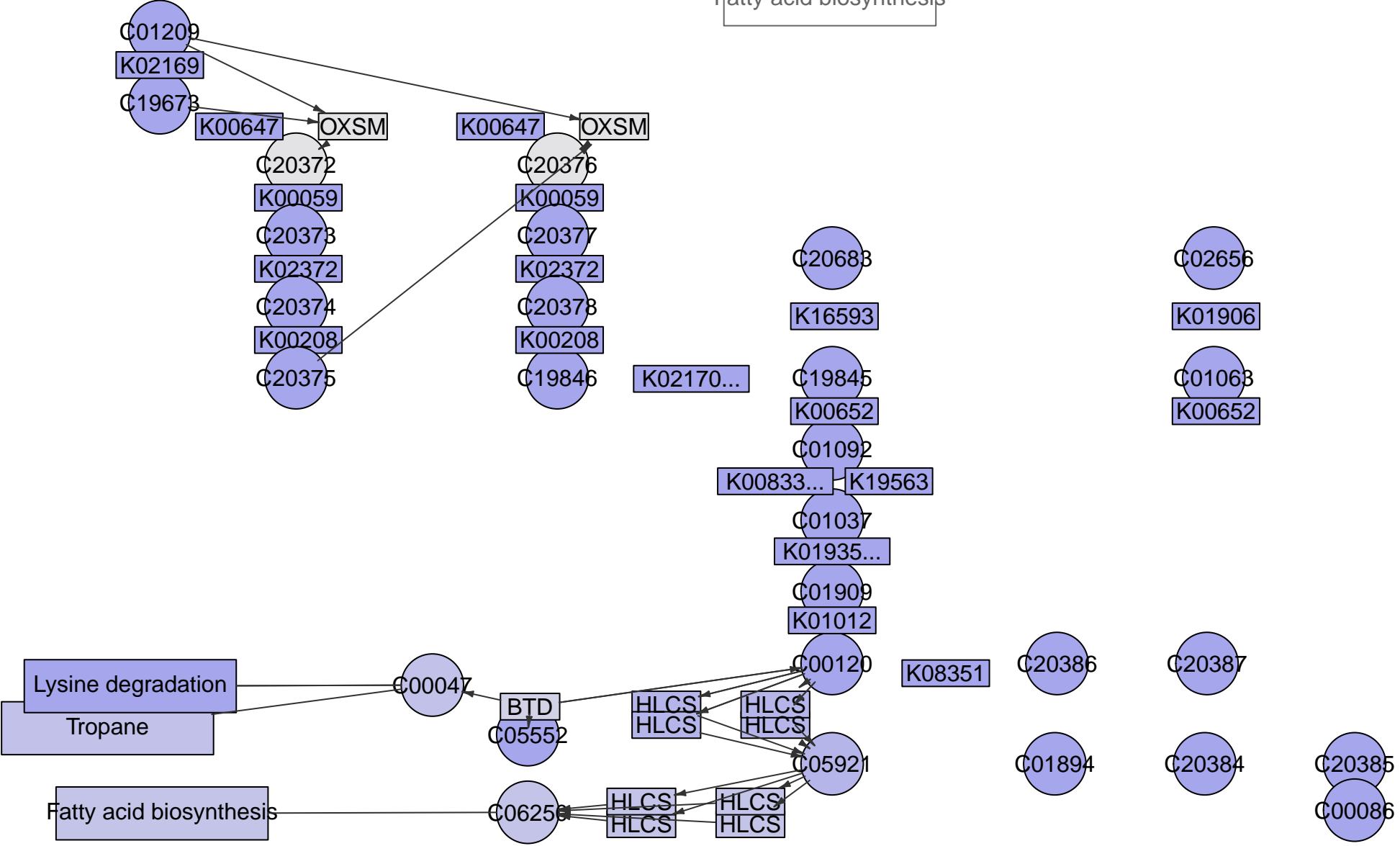
Biotin metabolism  
MPI-136

Fatty acid biosynthesis



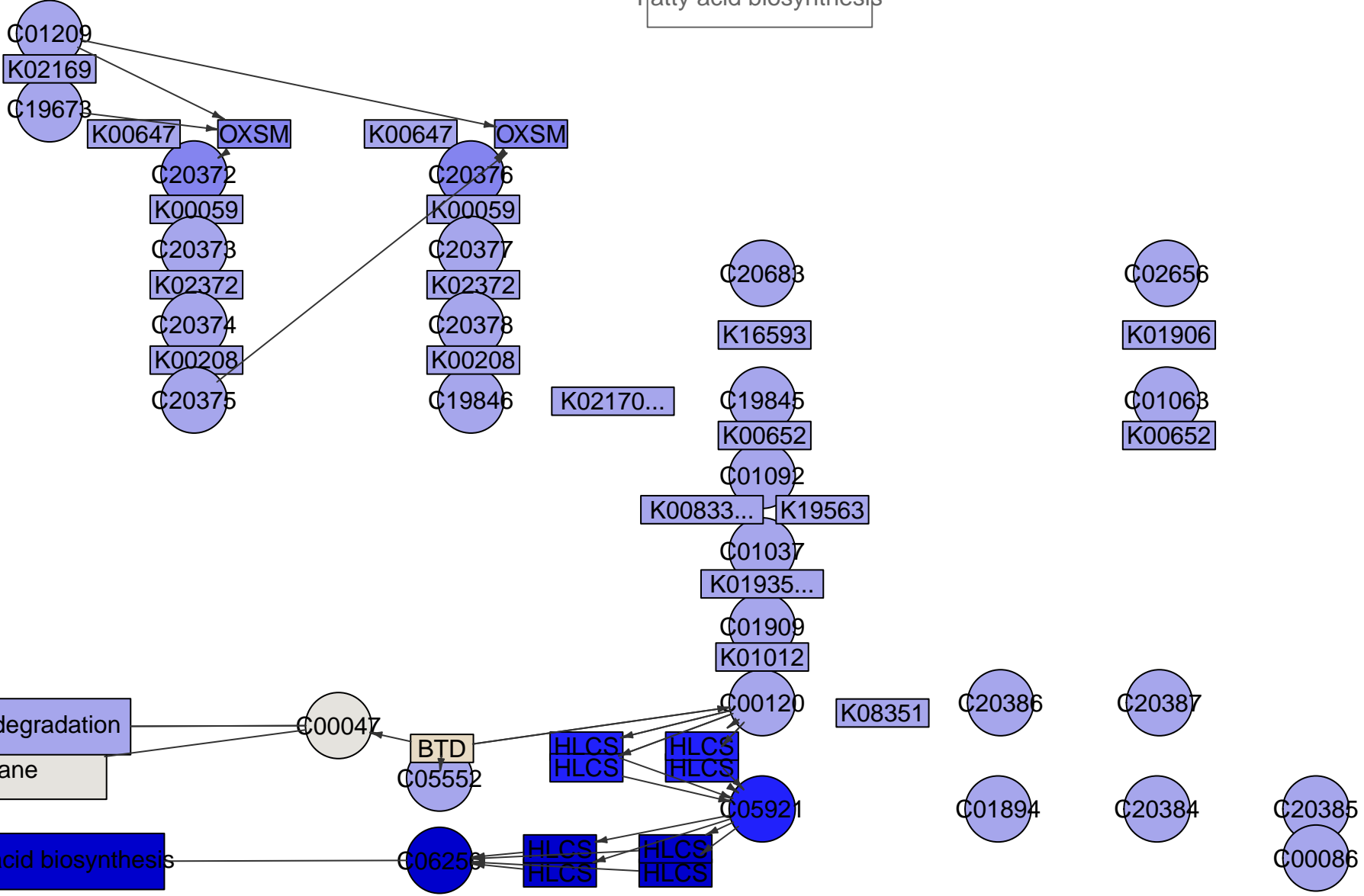
Biotin metabolism  
MPI-141

Fatty acid biosynthesis



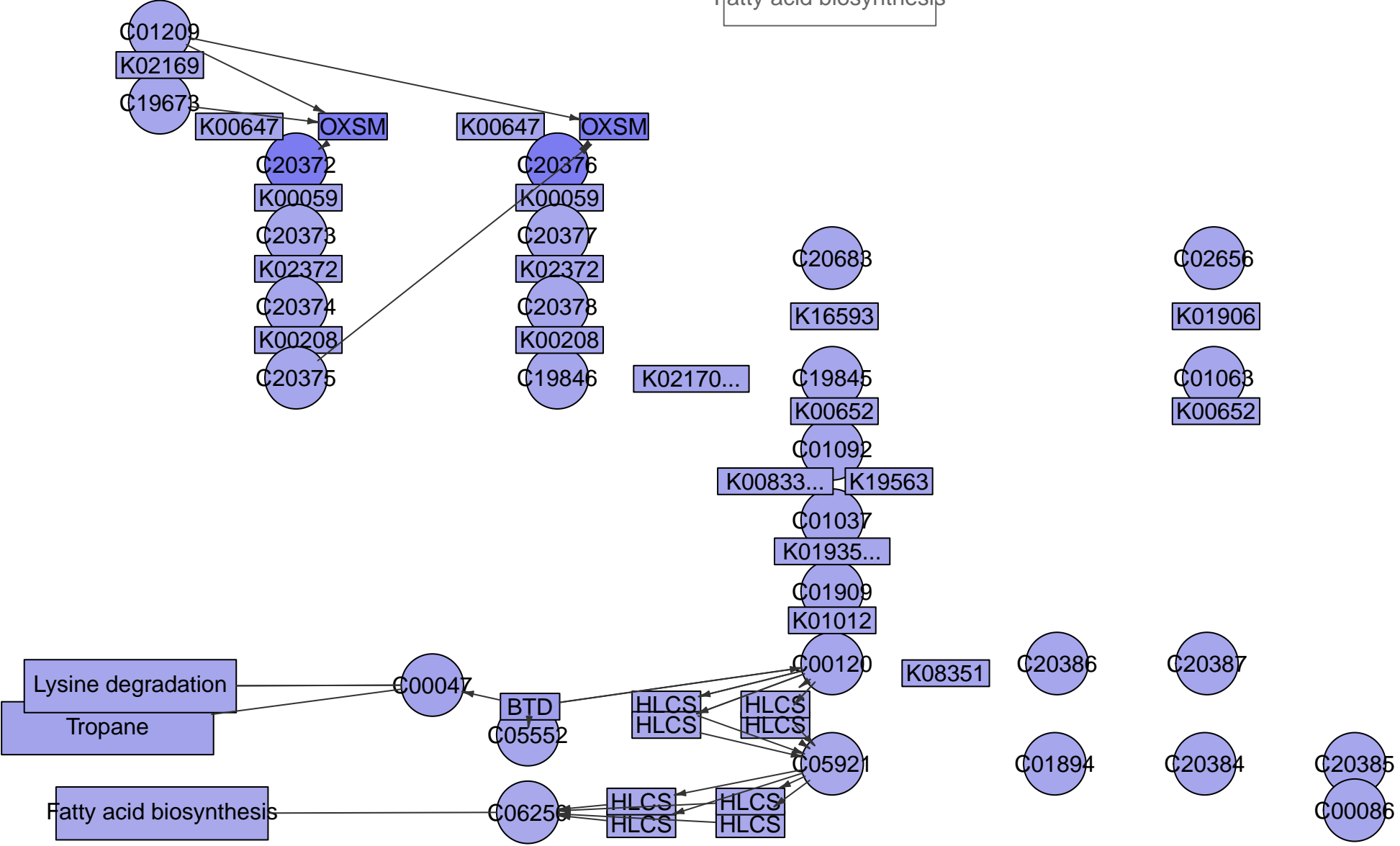
Biotin metabolism  
MPI-142

Fatty acid biosynthesis



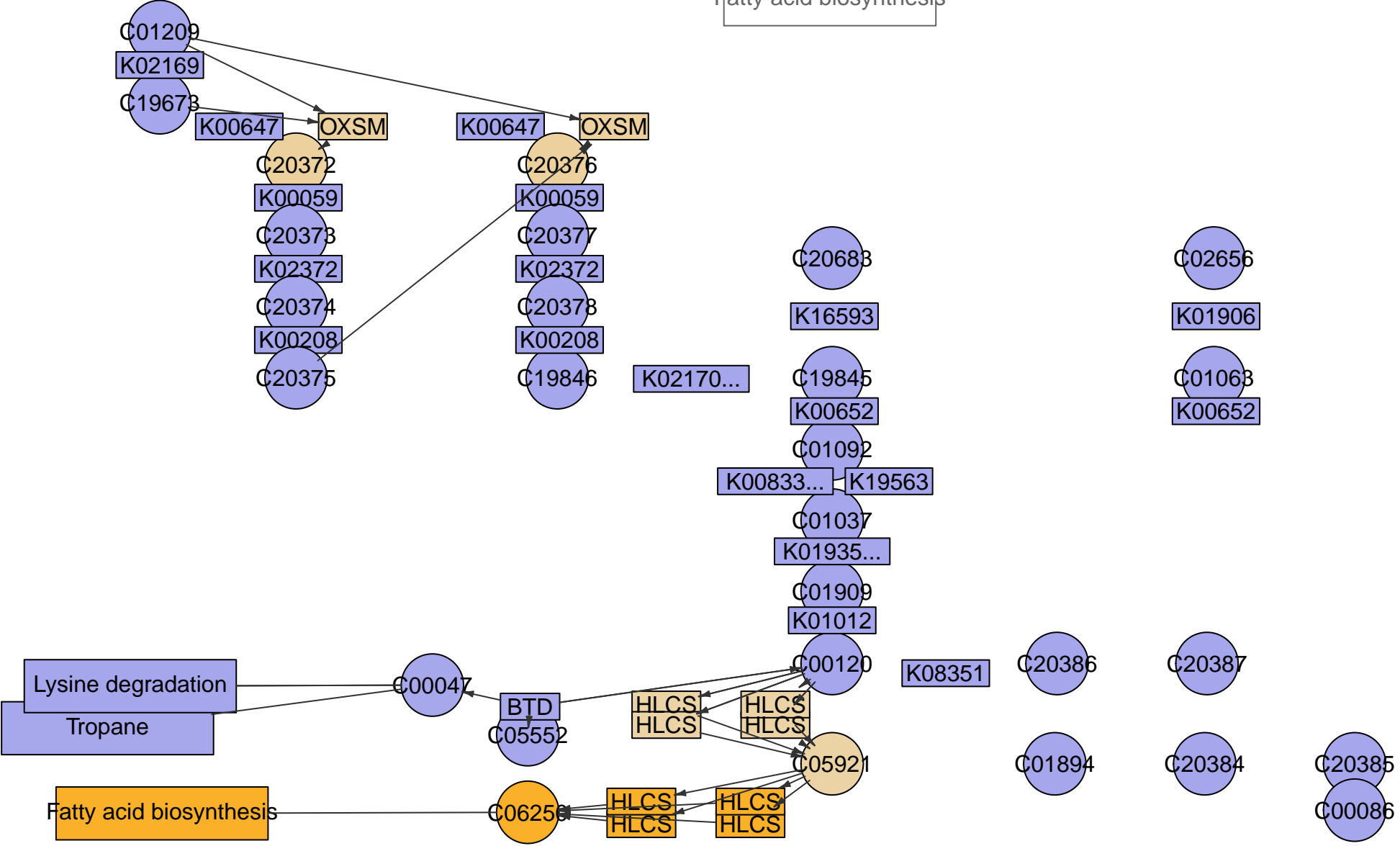
Biotin metabolism  
MPI-145

Fatty acid biosynthesis



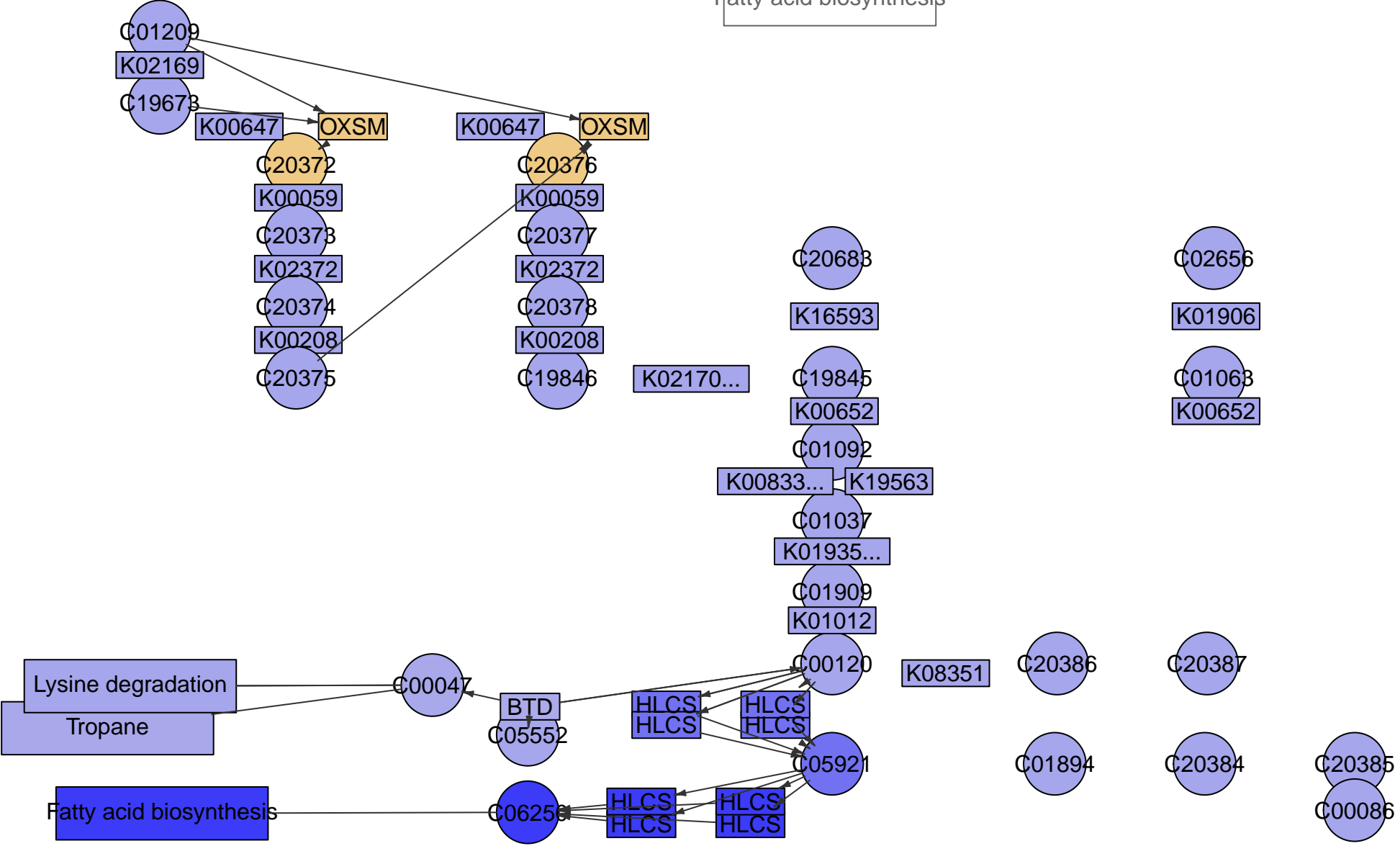
Biotin metabolism  
MPI-146

Fatty acid biosynthesis



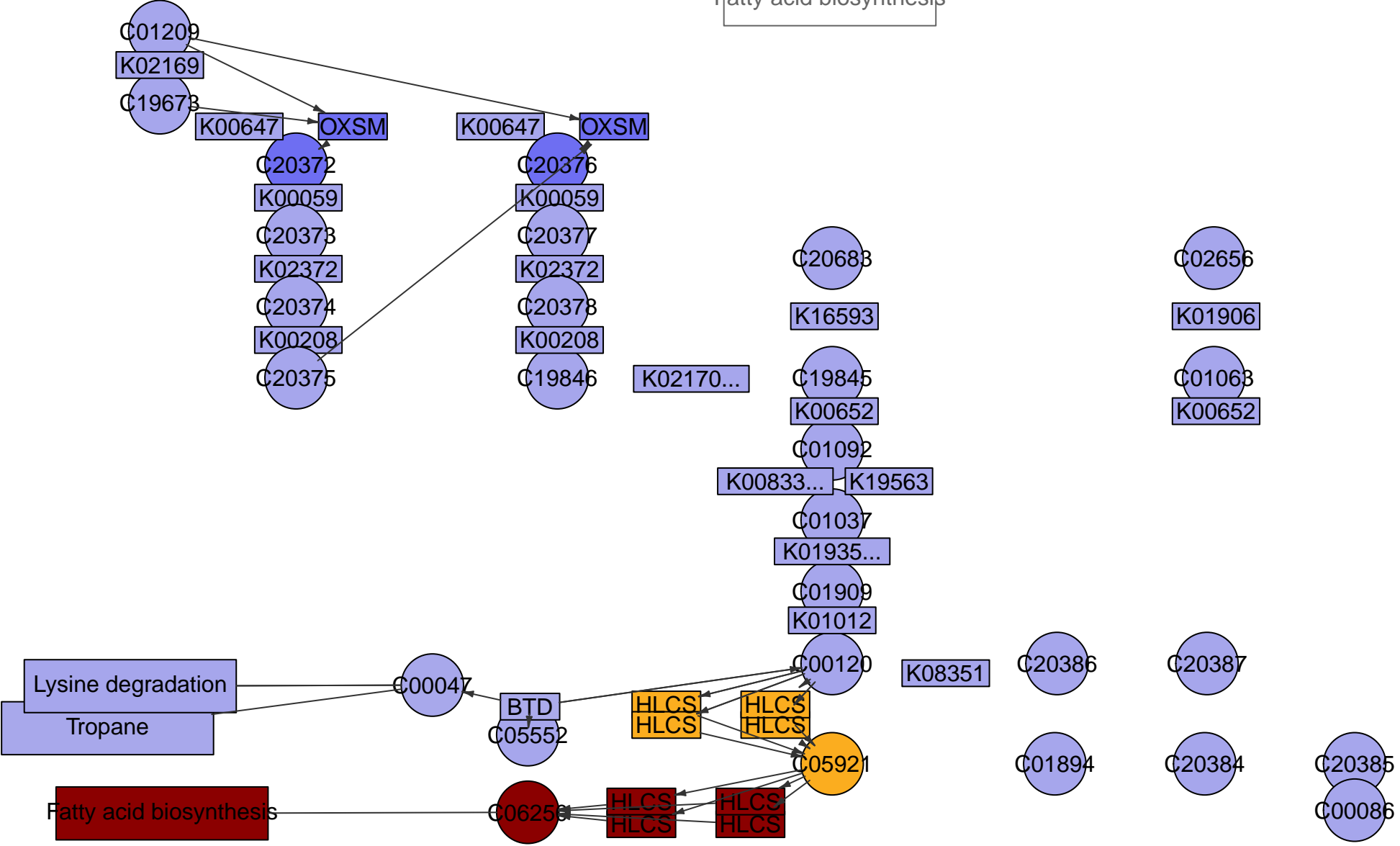
Biotin metabolism  
MPI-149

Fatty acid biosynthesis



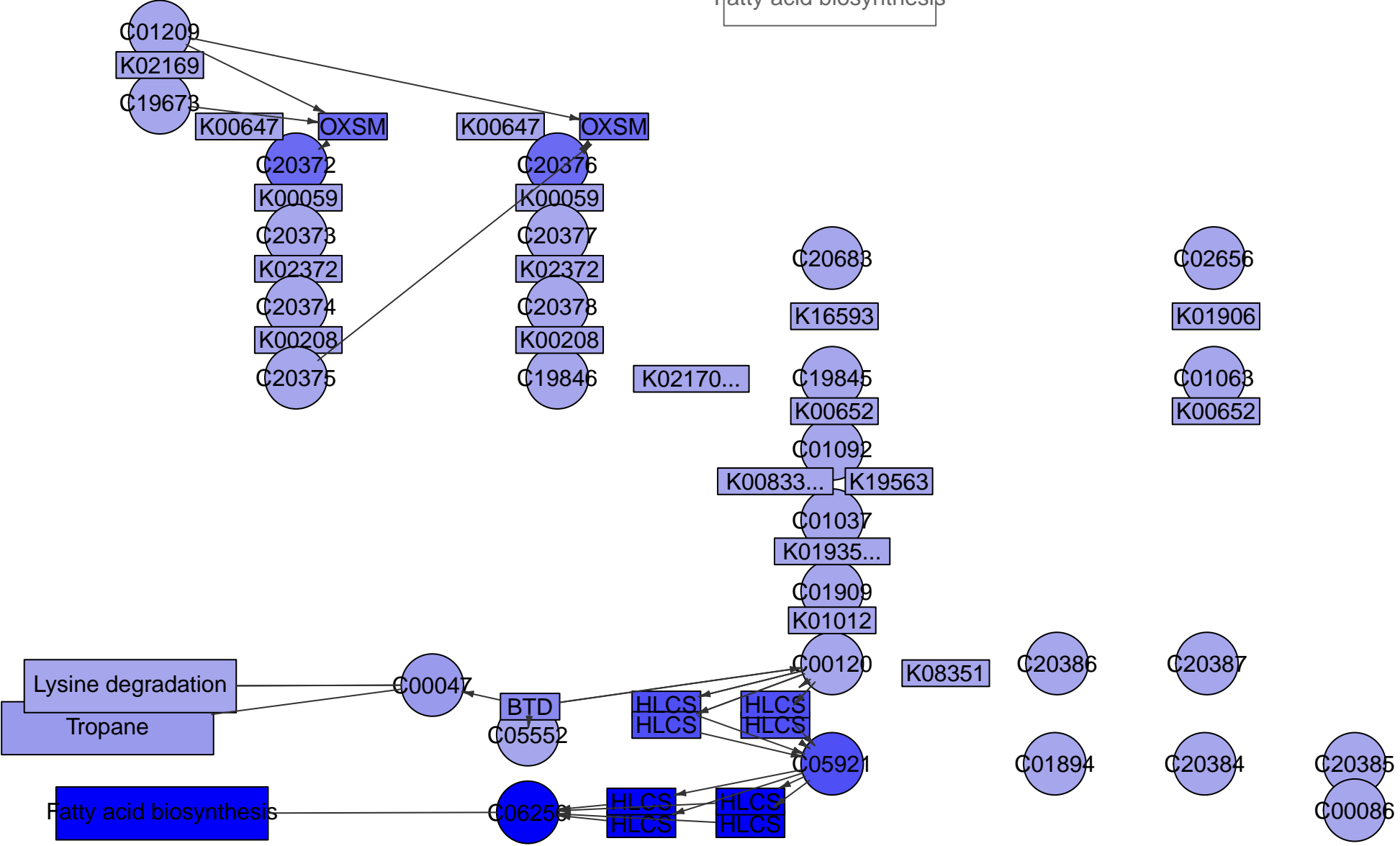
Biotin metabolism  
MPI-150

Fatty acid biosynthesis



Biotin metabolism  
MPI-151

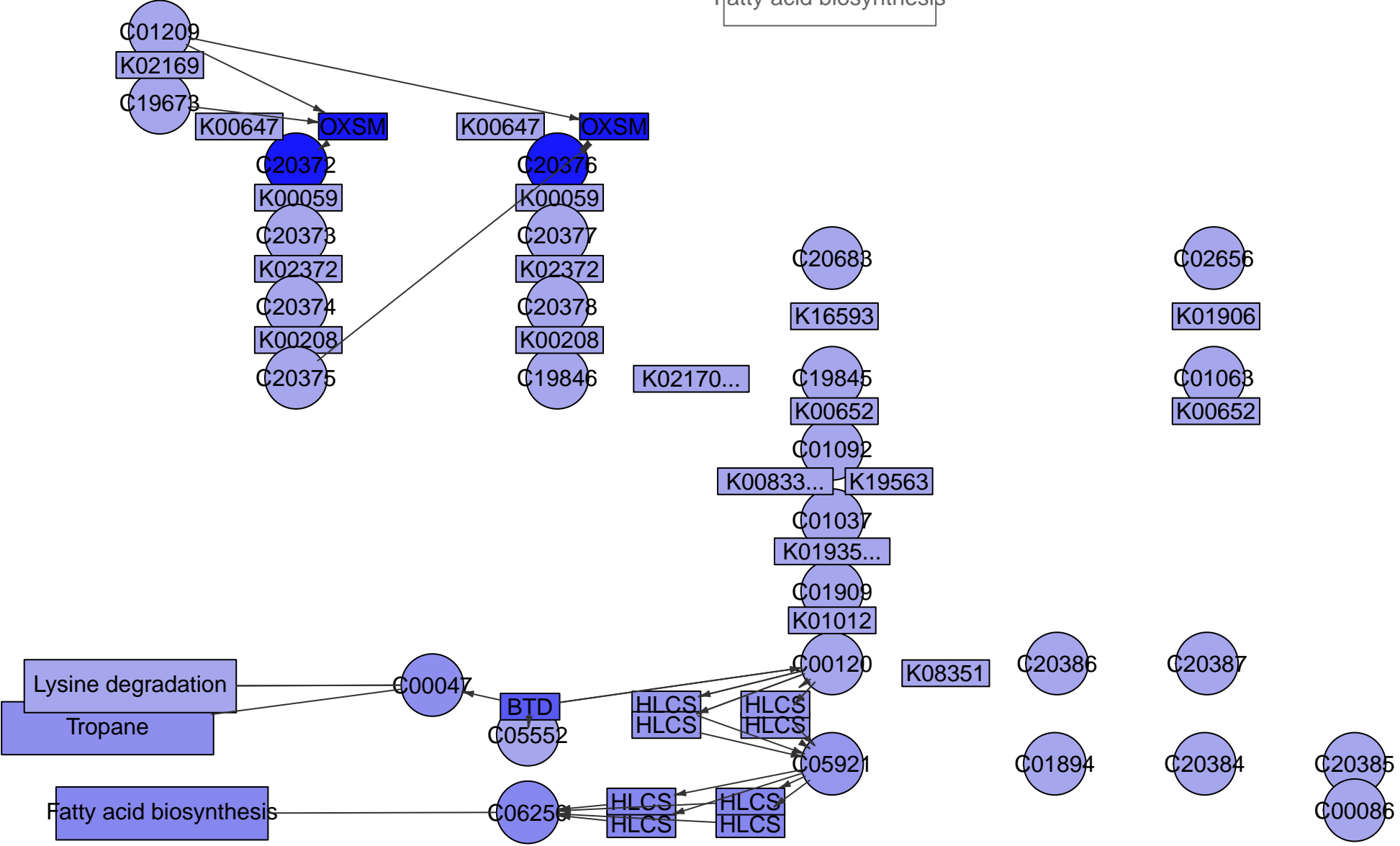
Fatty acid biosynthesis





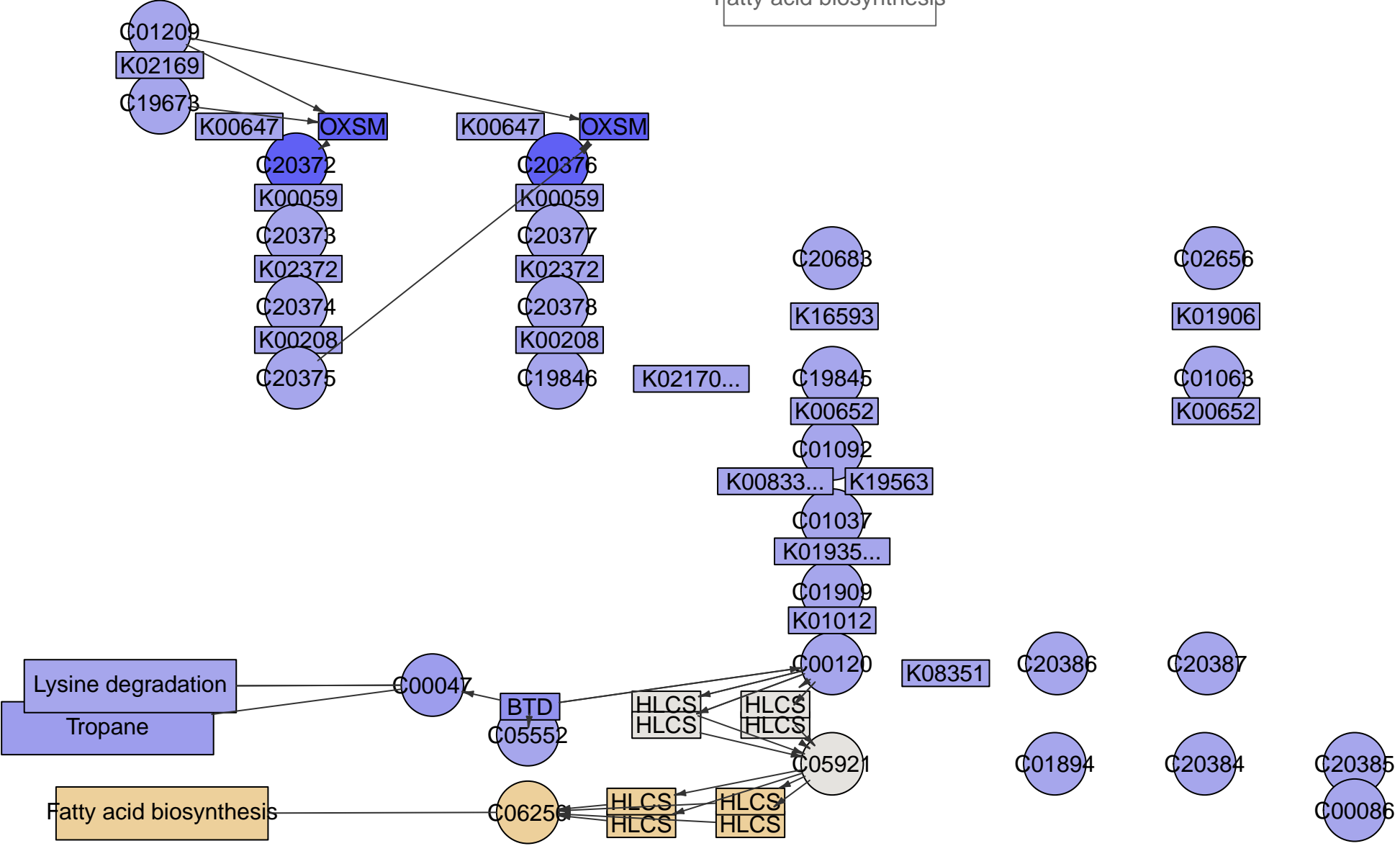
Biotin metabolism  
MPI-152

Fatty acid biosynthesis



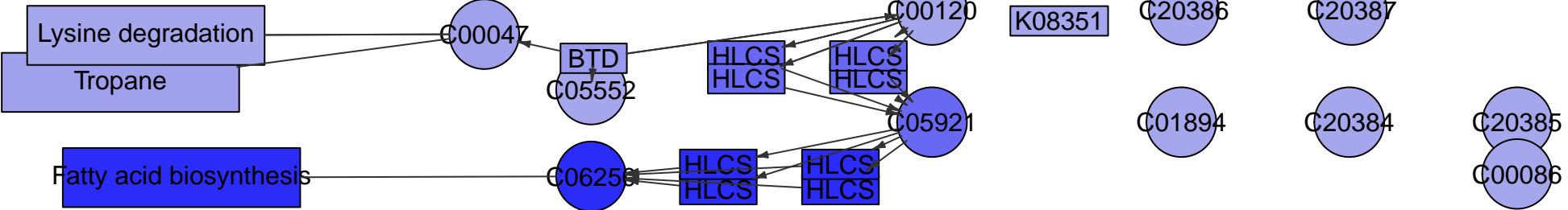
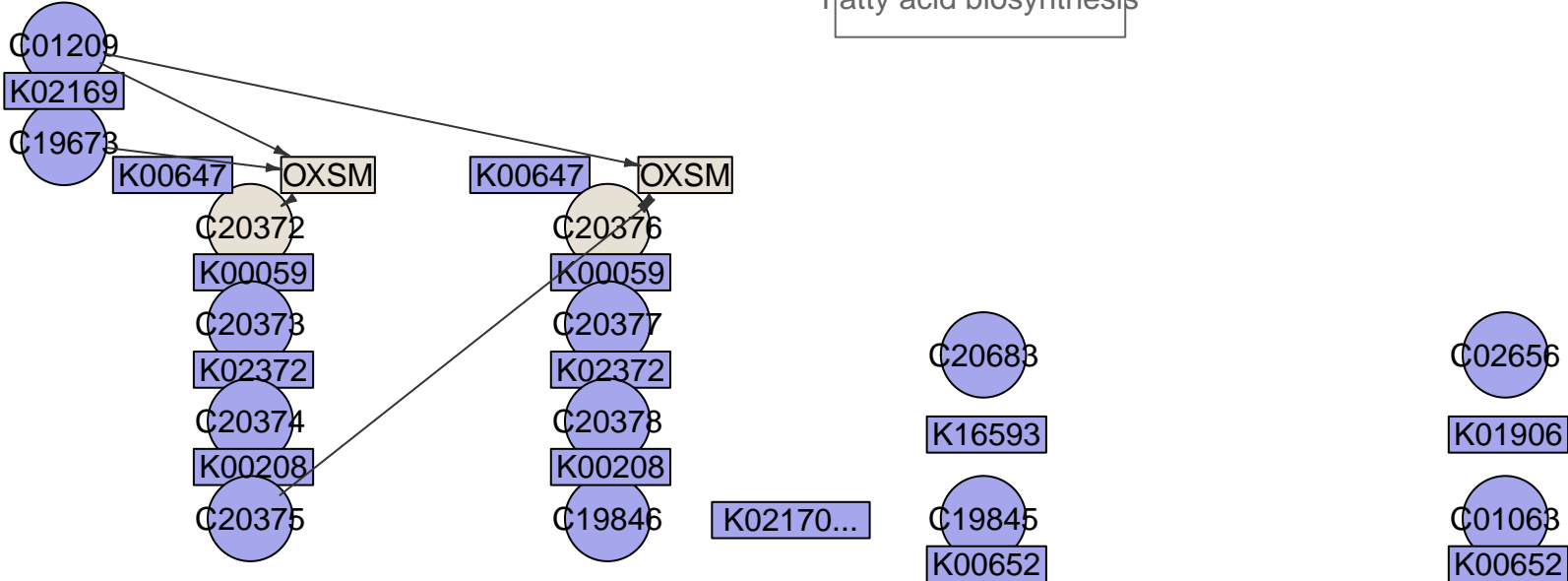
Biotin metabolism  
MPI-153

Fatty acid biosynthesis



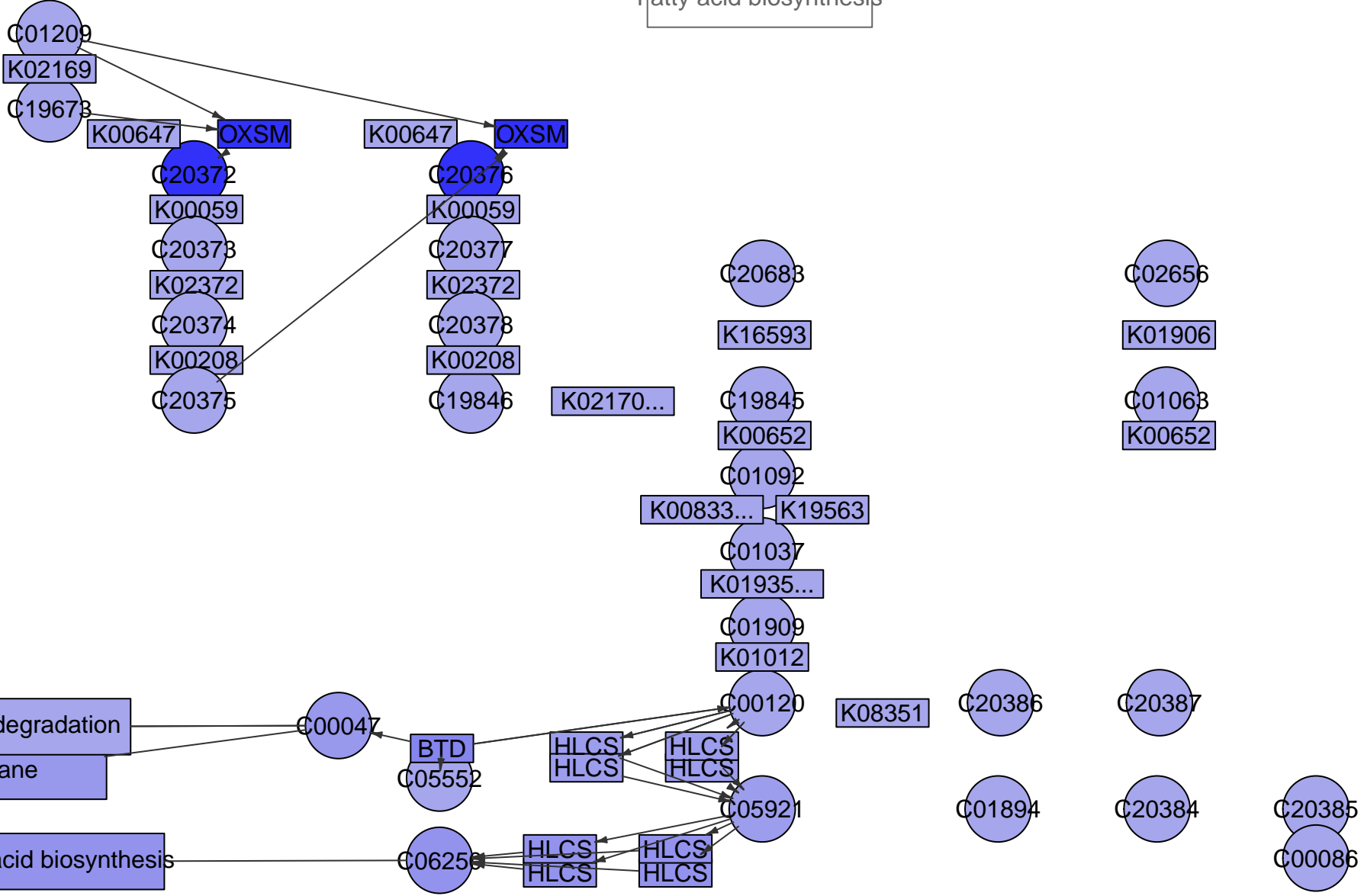
Biotin metabolism  
MPI-154

Fatty acid biosynthesis



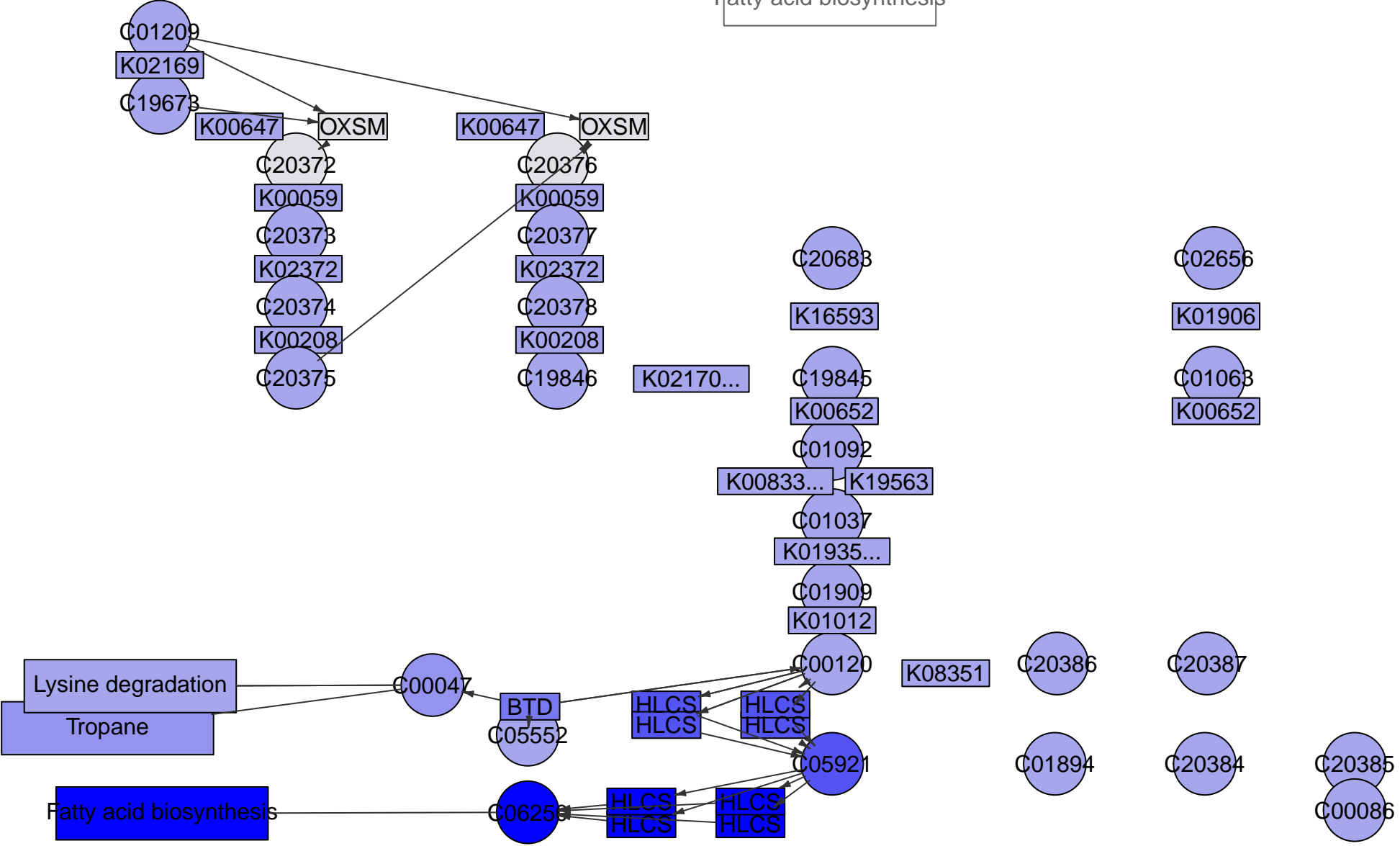
Biotin metabolism  
MPI-155

Fatty acid biosynthesis



Biotin metabolism  
MPI-159

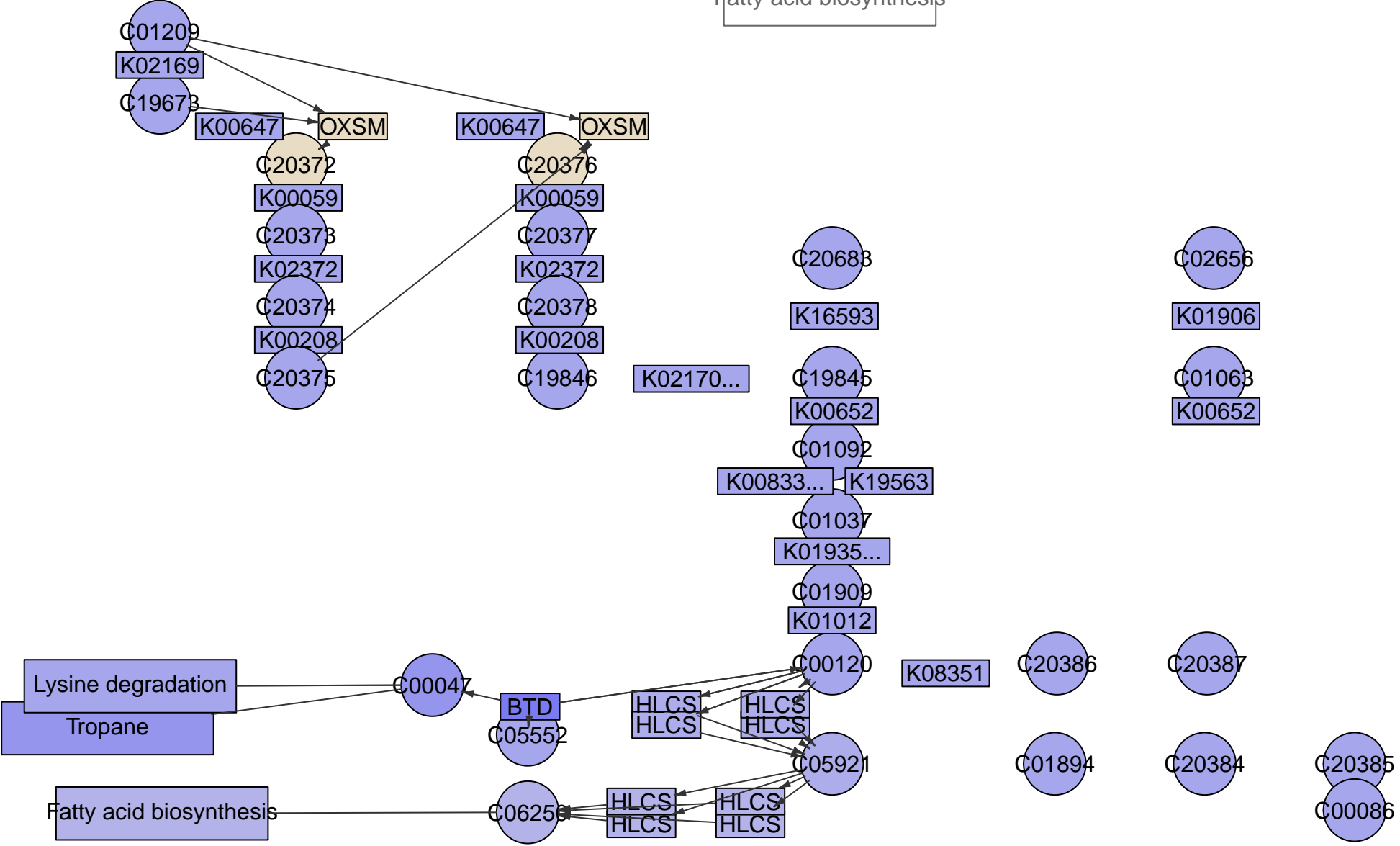
Fatty acid biosynthesis





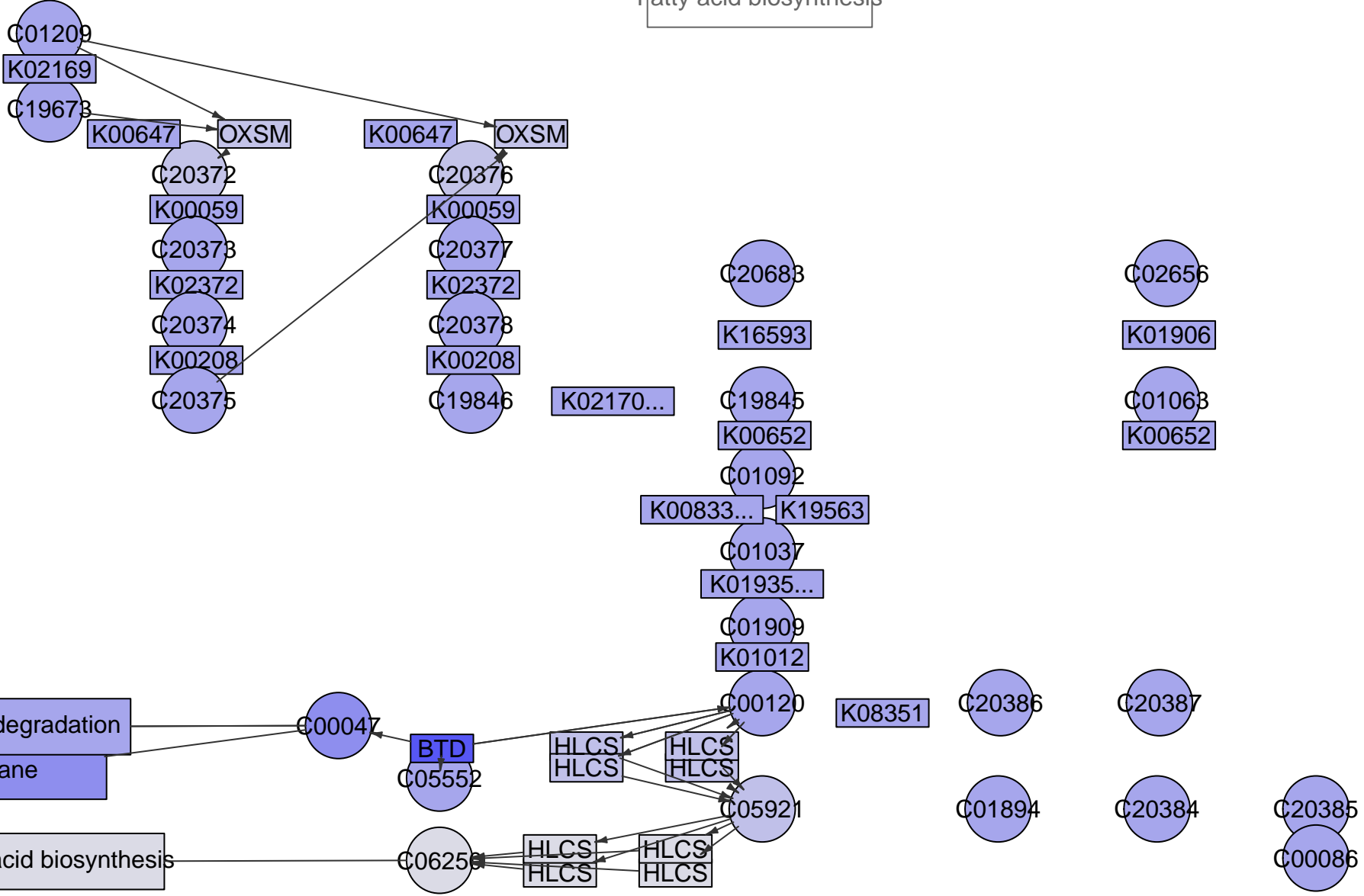
Biotin metabolism  
MPI-164

Fatty acid biosynthesis



Biotin metabolism  
MPI-166

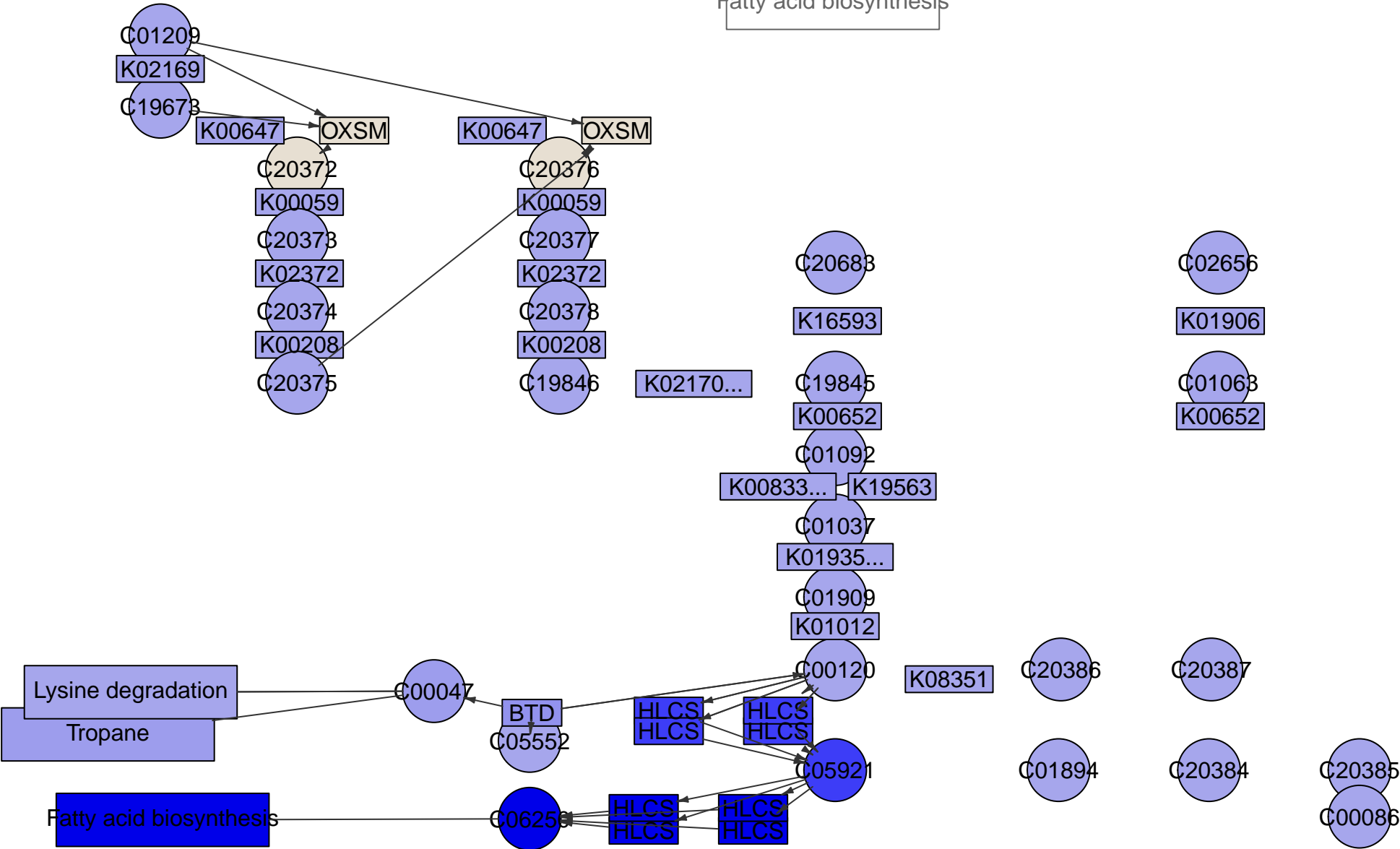
Fatty acid biosynthesis





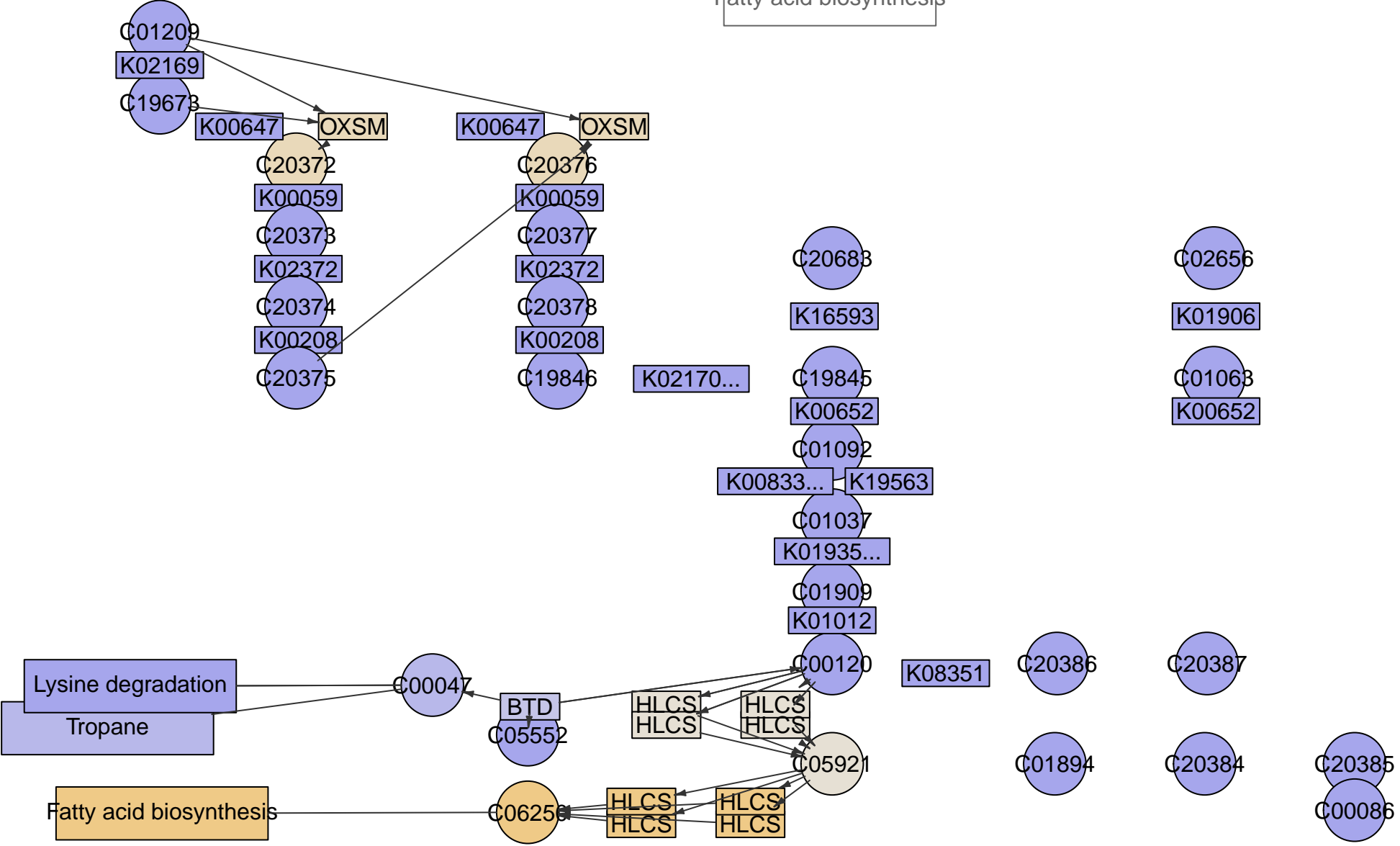
Biotin metabolism  
MPI-167

Fatty acid biosynthesis



Biotin metabolism  
MPI-168

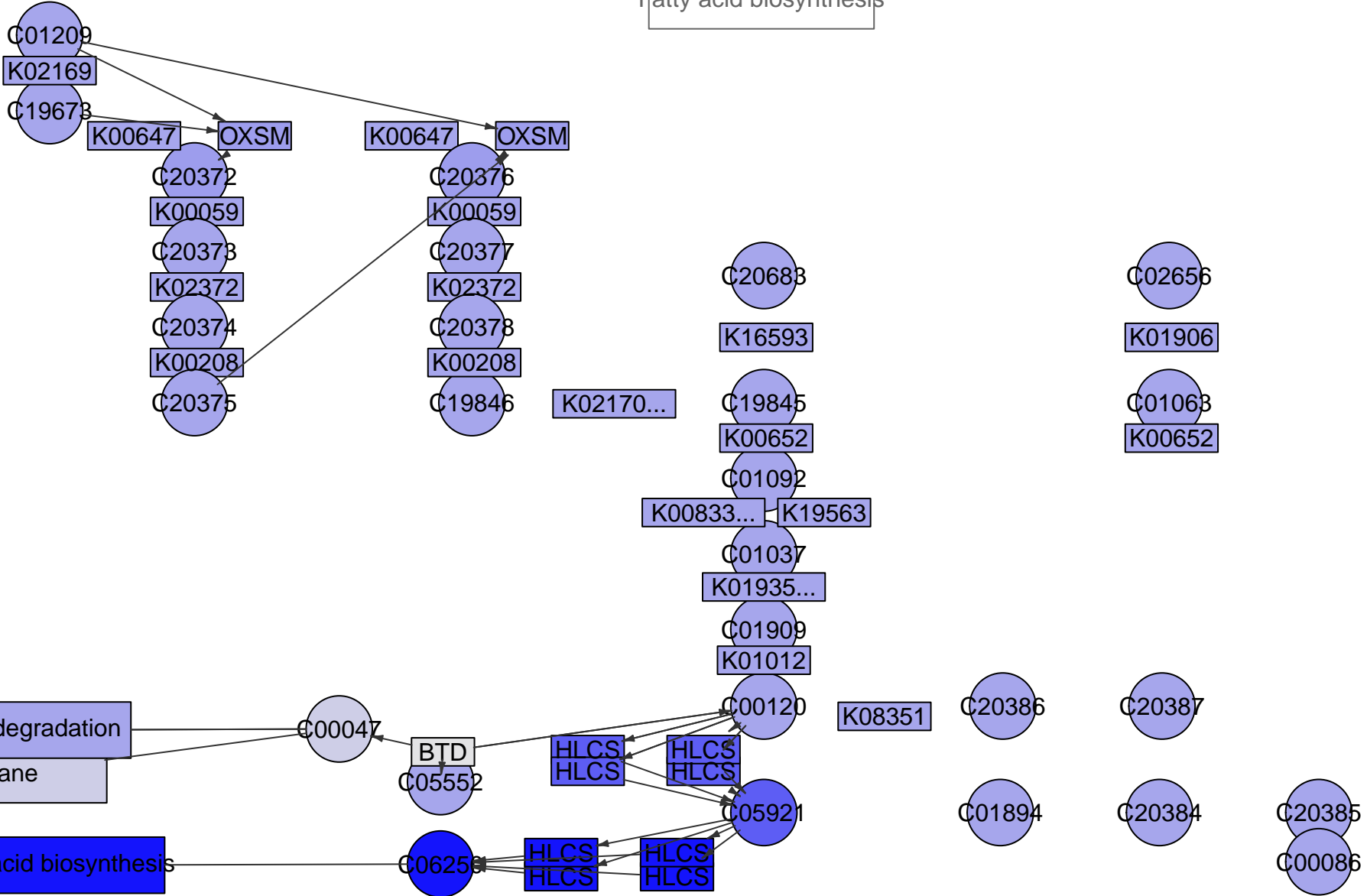
Fatty acid biosynthesis





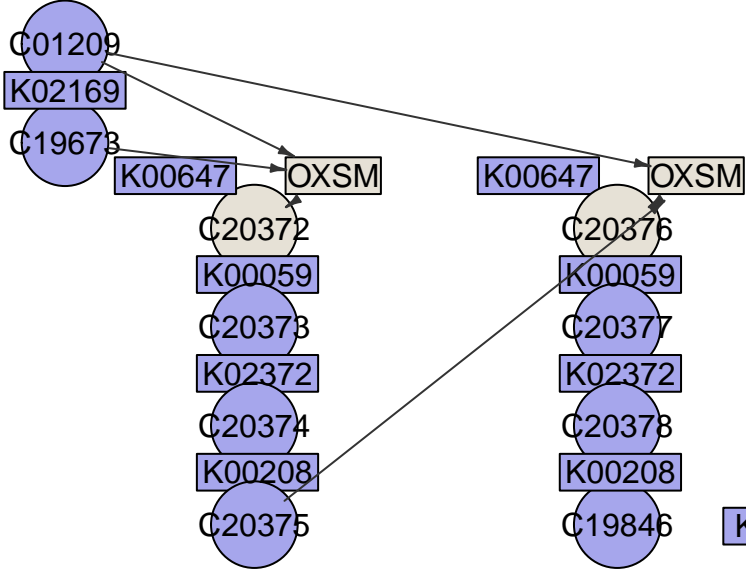
Biotin metabolism  
MPI-173

Fatty acid biosynthesis



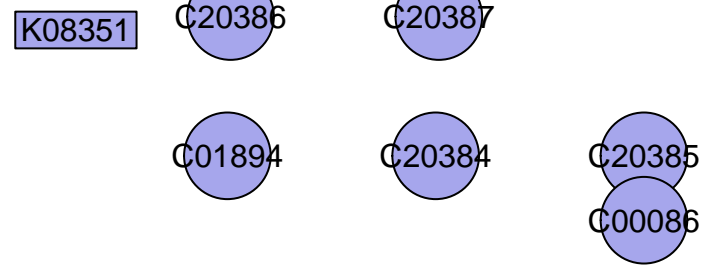
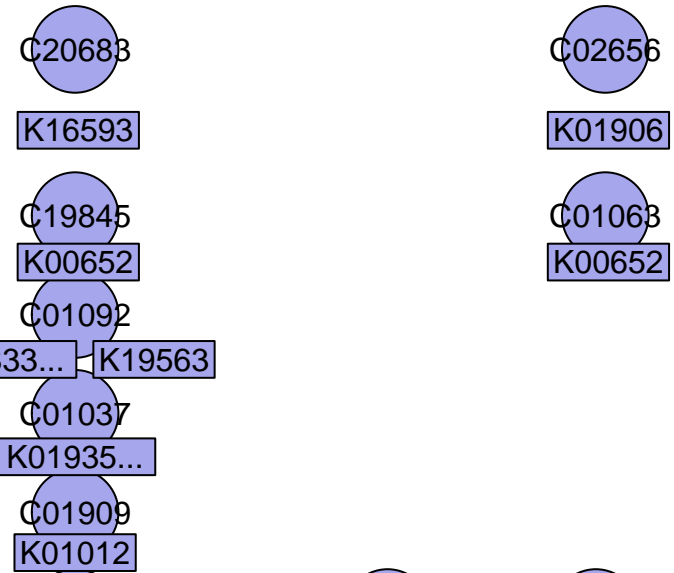
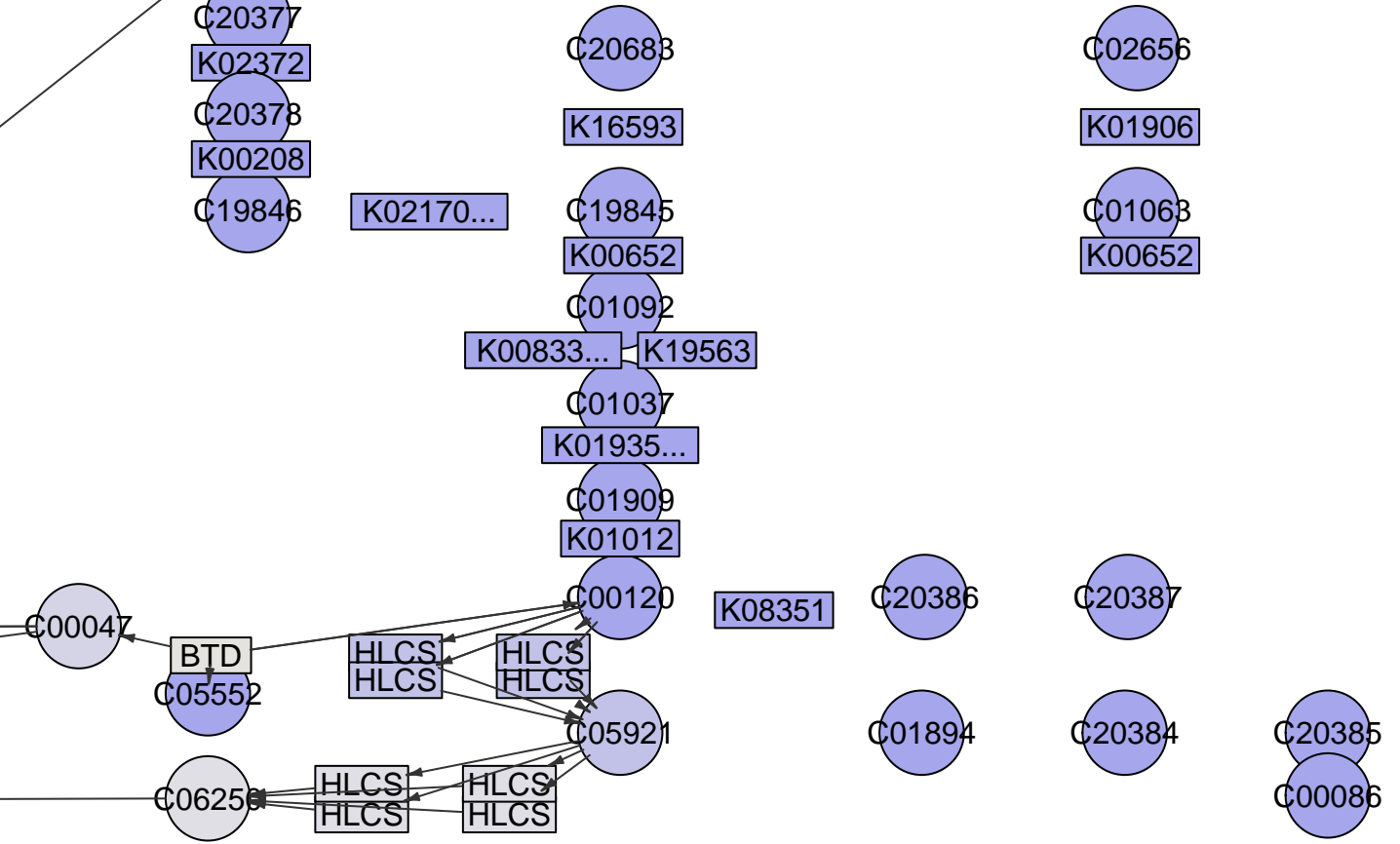
**Biotin metabolism**  
MPI-174

Fatty acid biosynthesis



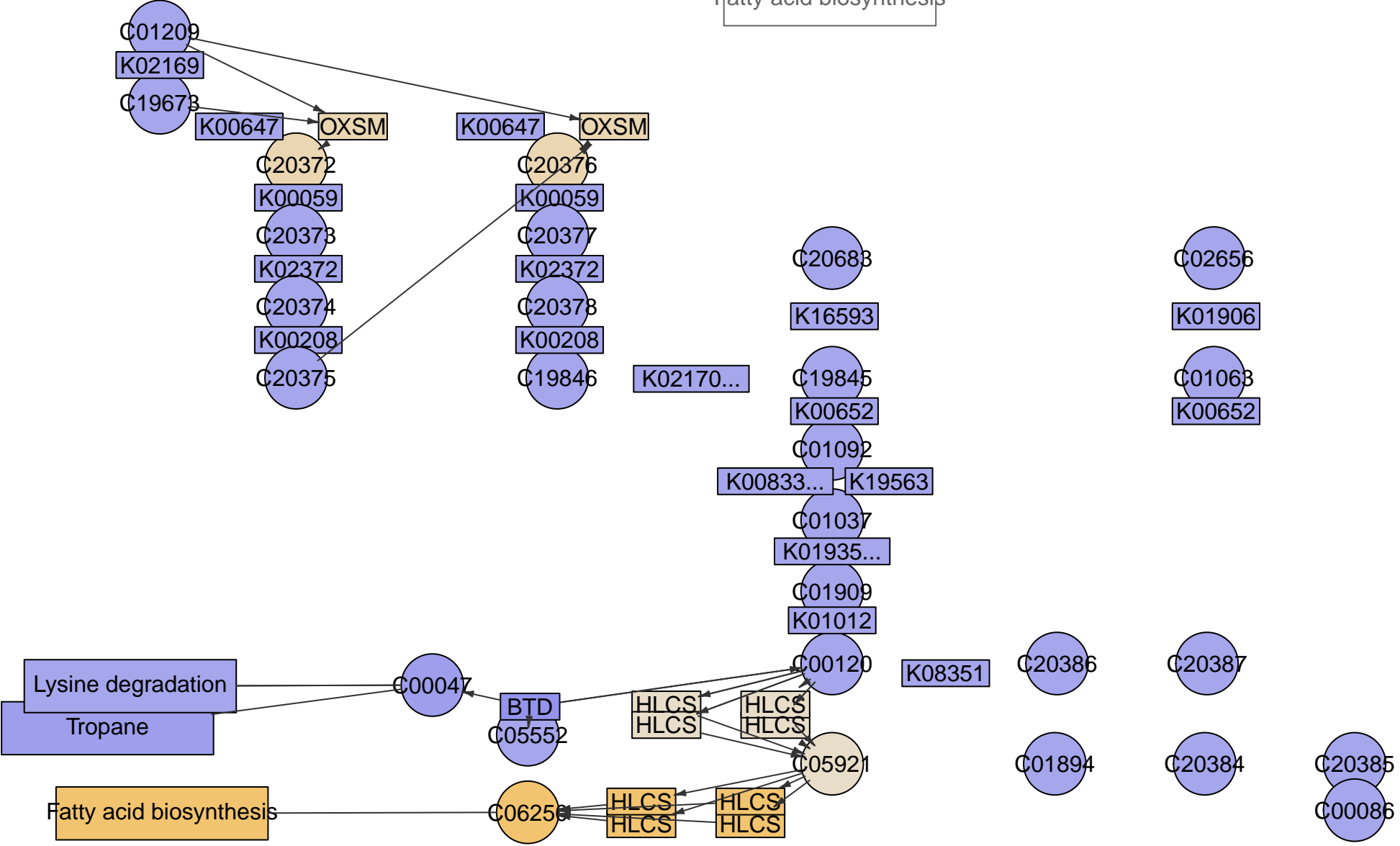
**Lysine degradation**  
Tropane

Fatty acid biosynthesis



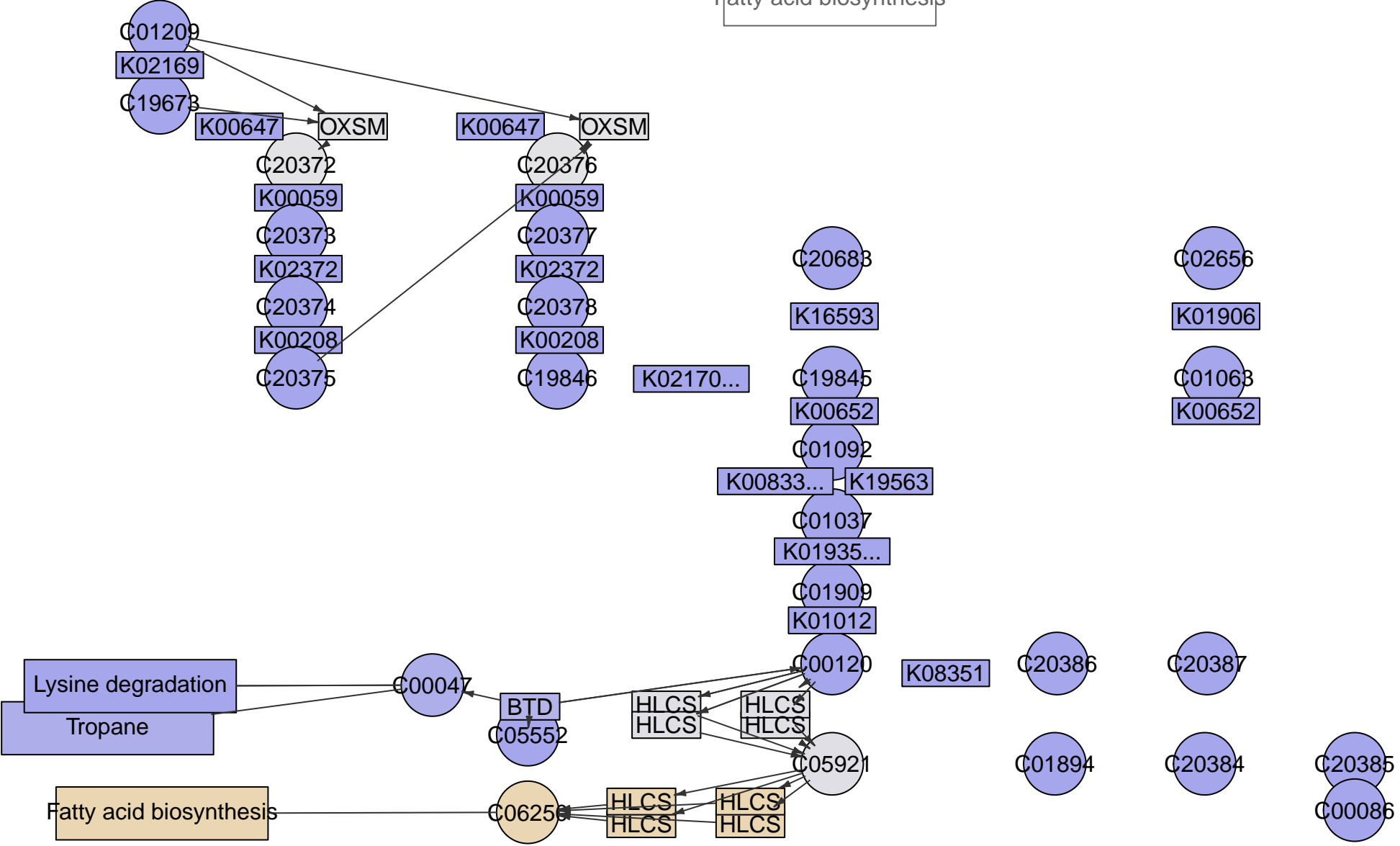
Biotin metabolism  
MPI-176

Fatty acid biosynthesis



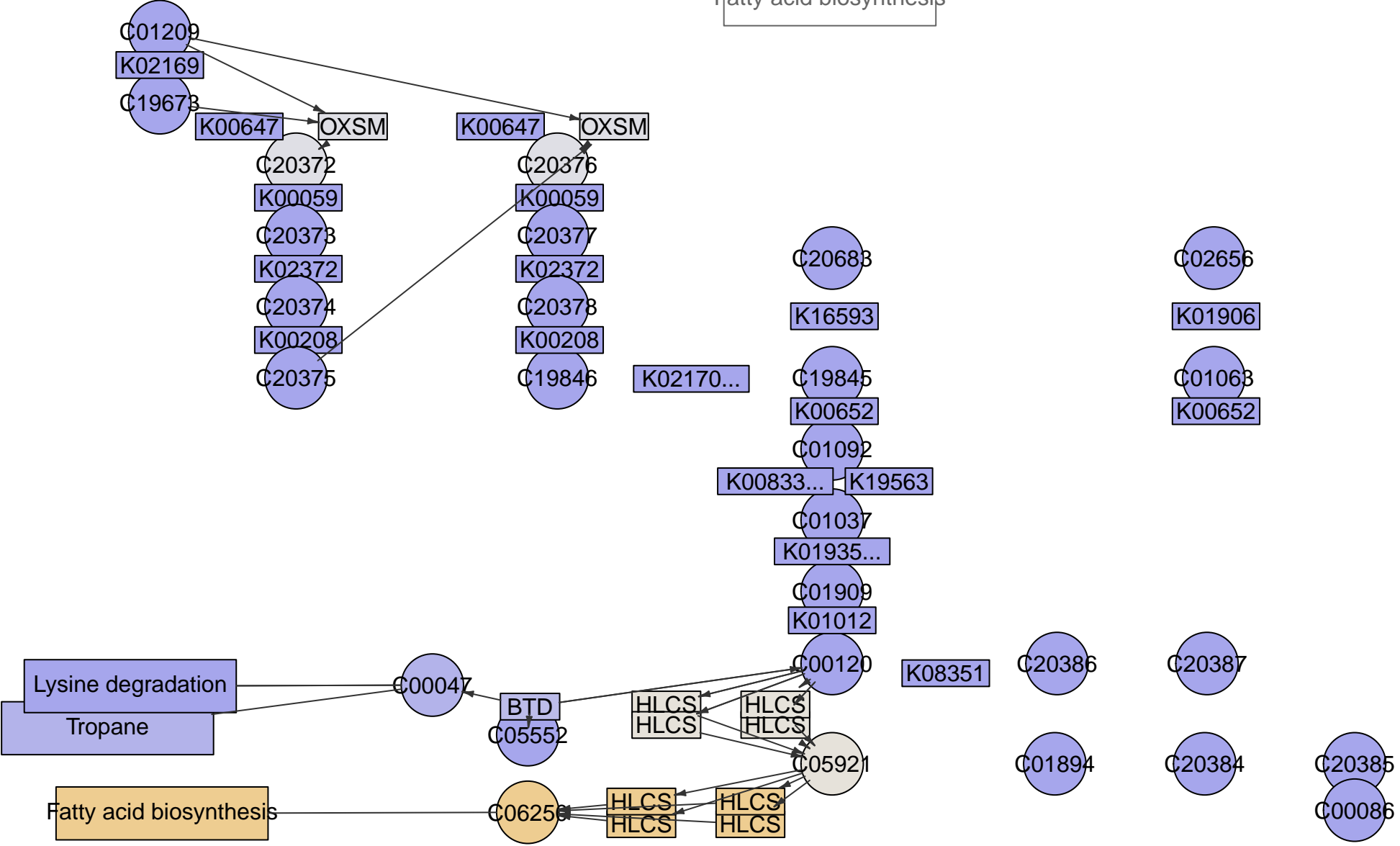
Biotin metabolism  
MPI-177

Fatty acid biosynthesis



Biotin metabolism  
MPI-178

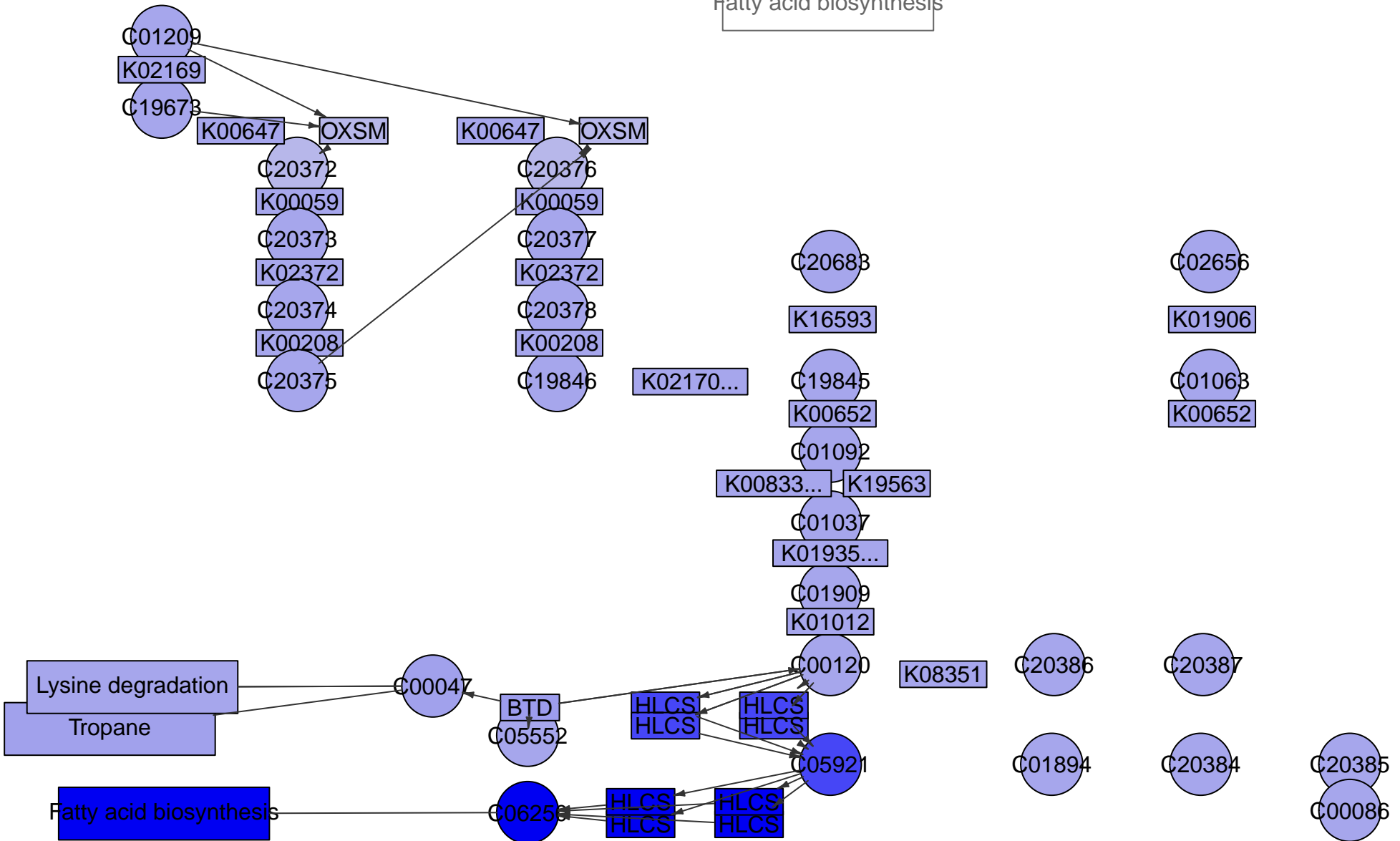
Fatty acid biosynthesis





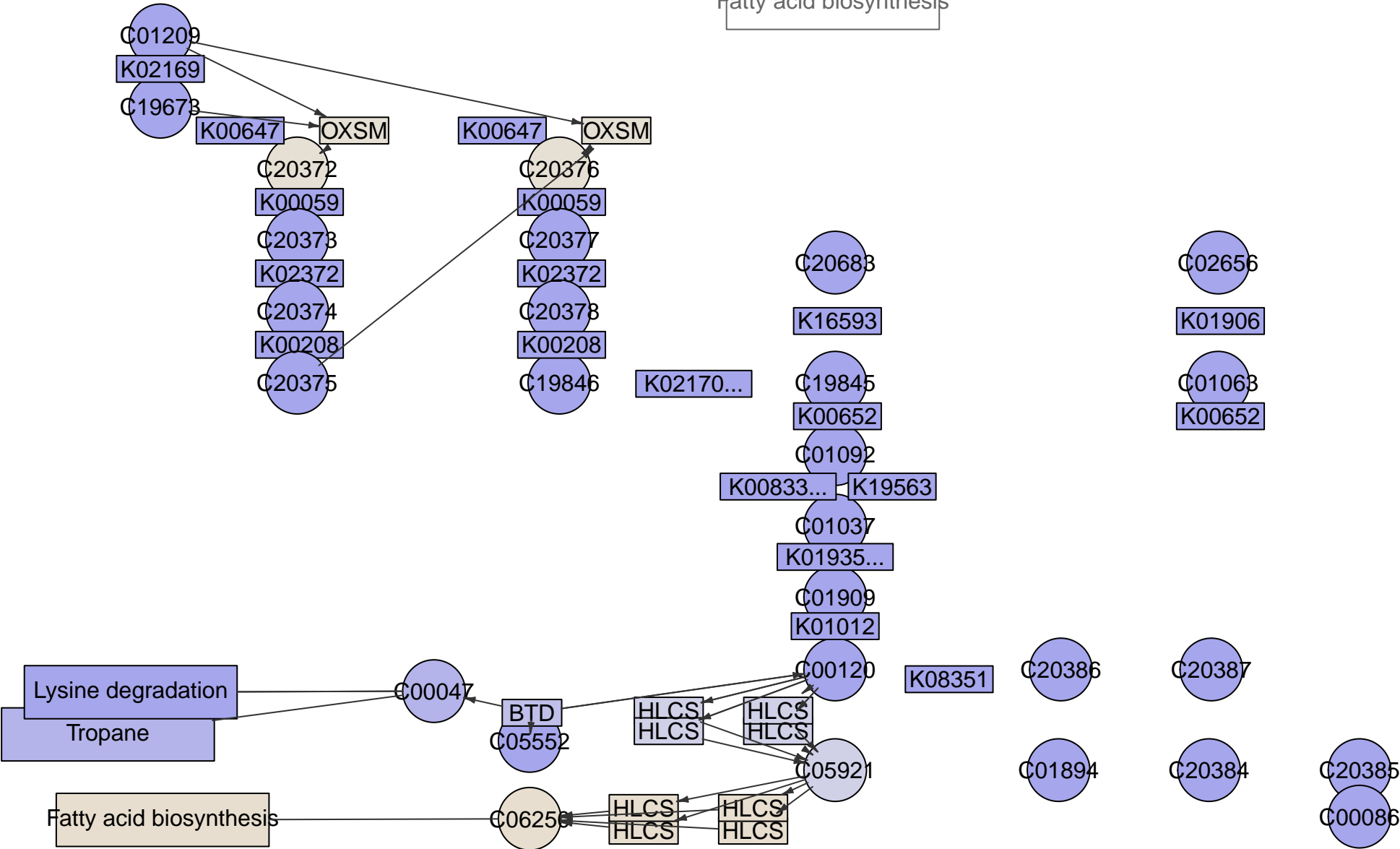
Biotin metabolism  
MPI-179

Fatty acid biosynthesis



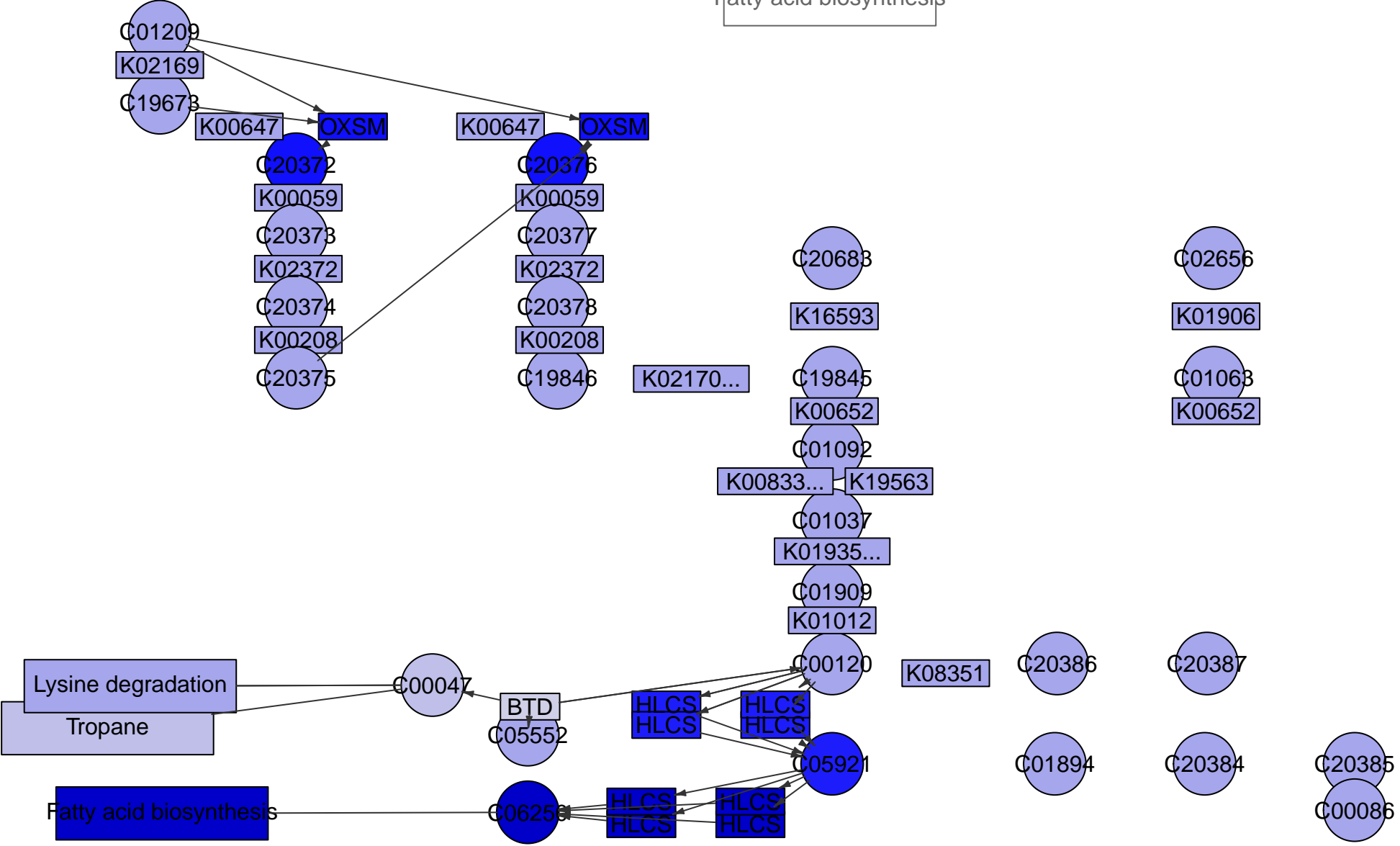
Biotin metabolism  
MPI-180

Fatty acid biosynthesis



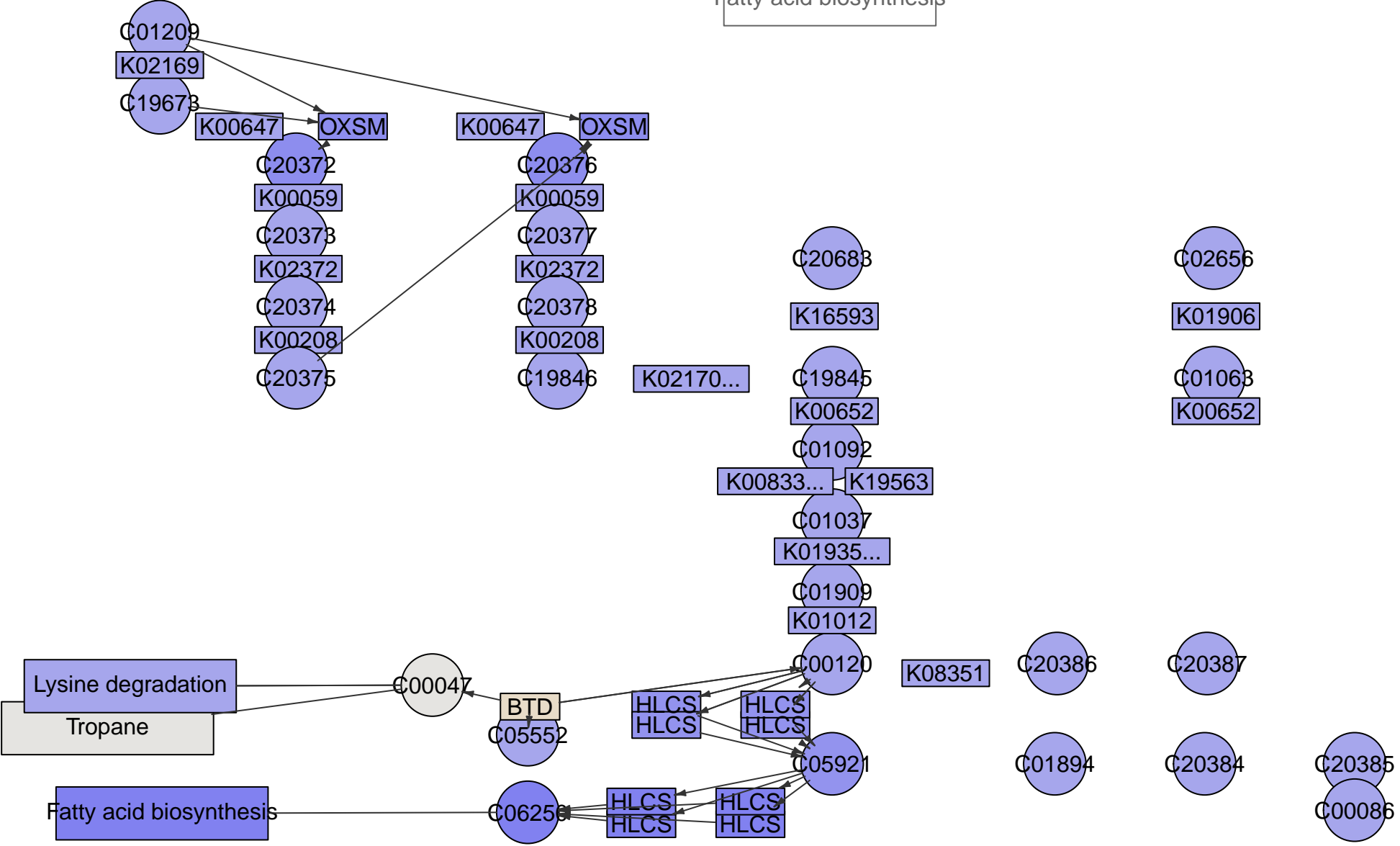
Biotin metabolism  
MPI-182

Fatty acid biosynthesis



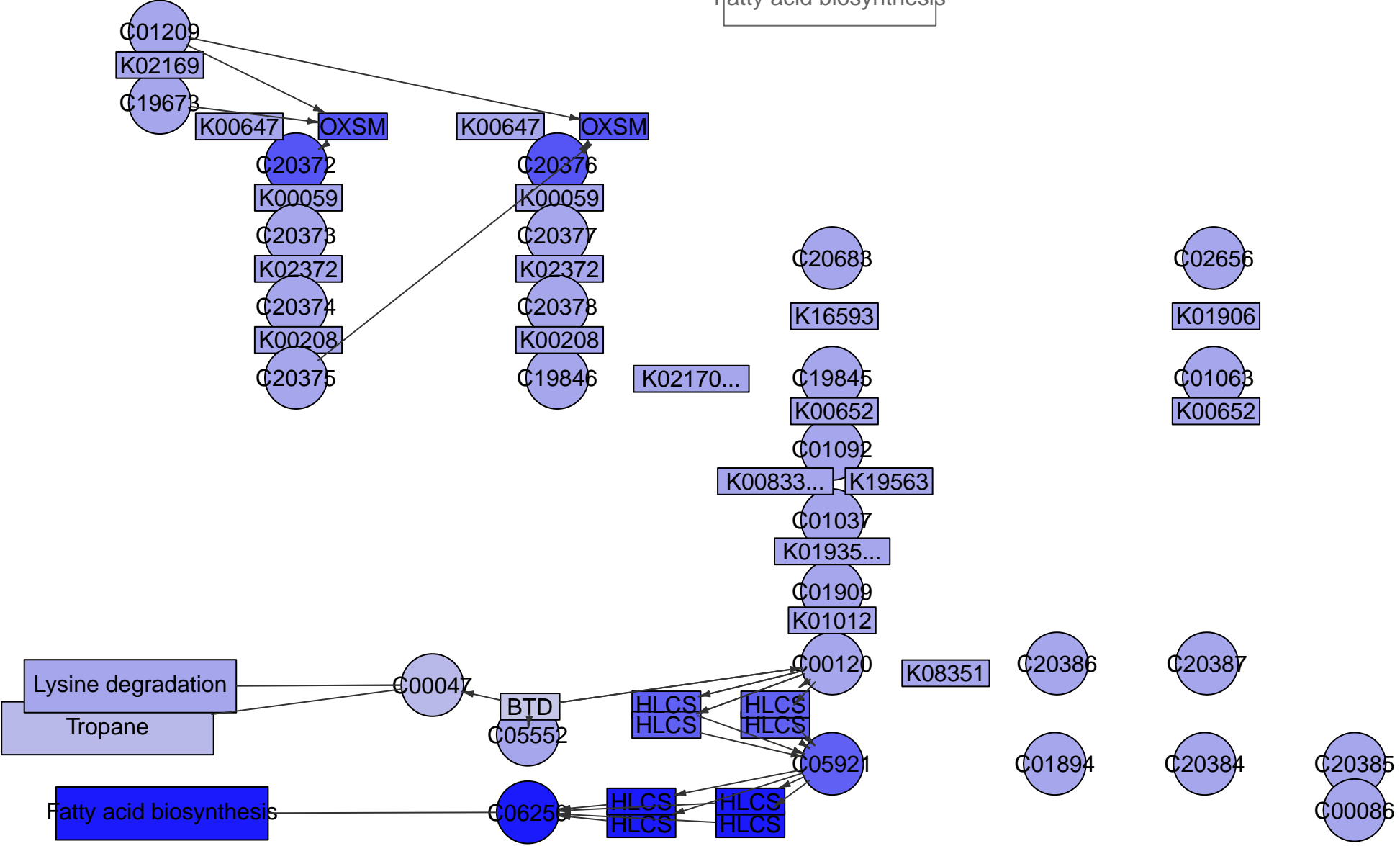
Biotin metabolism  
MPI-183

Fatty acid biosynthesis



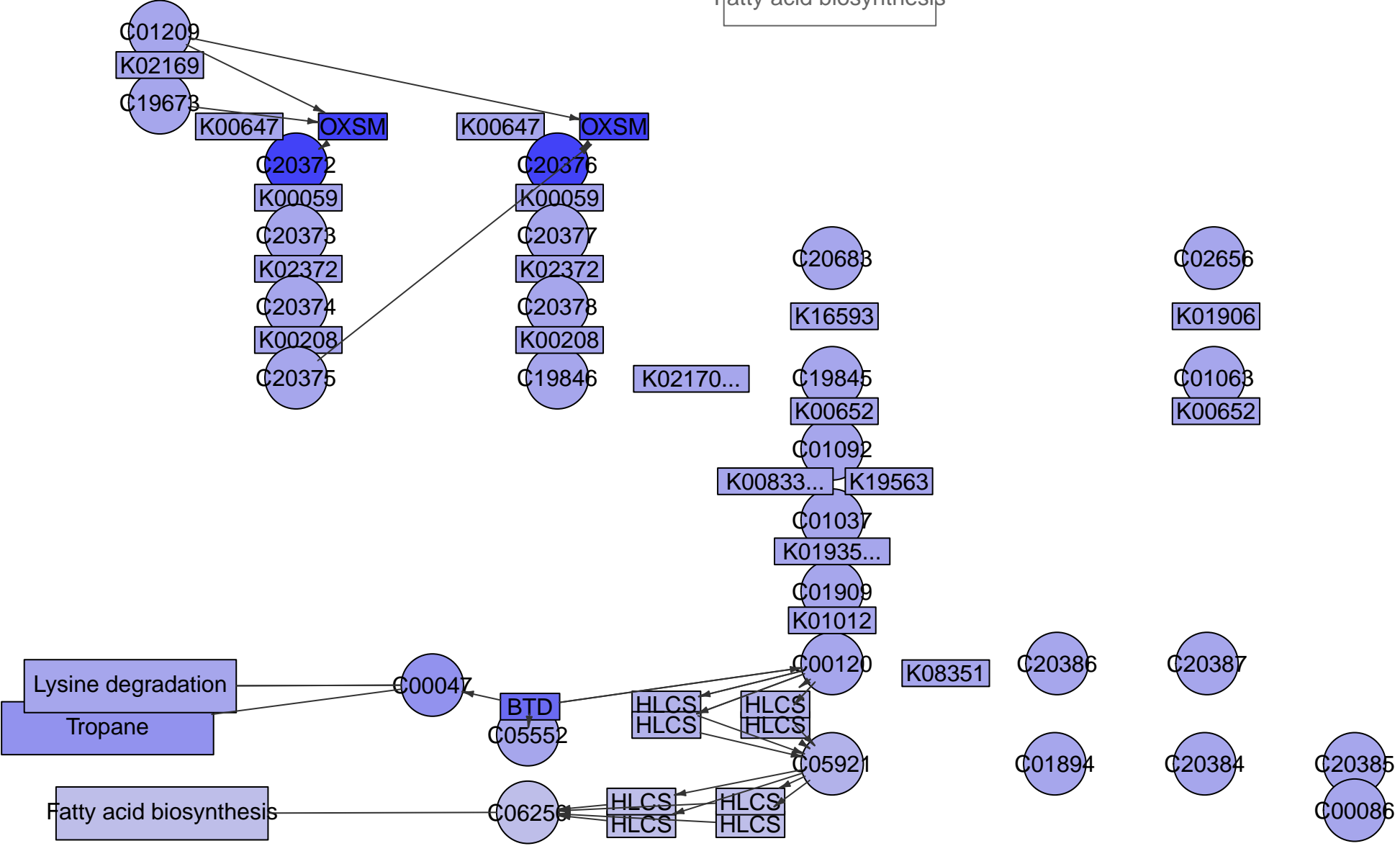
Biotin metabolism  
MPI-184

Fatty acid biosynthesis



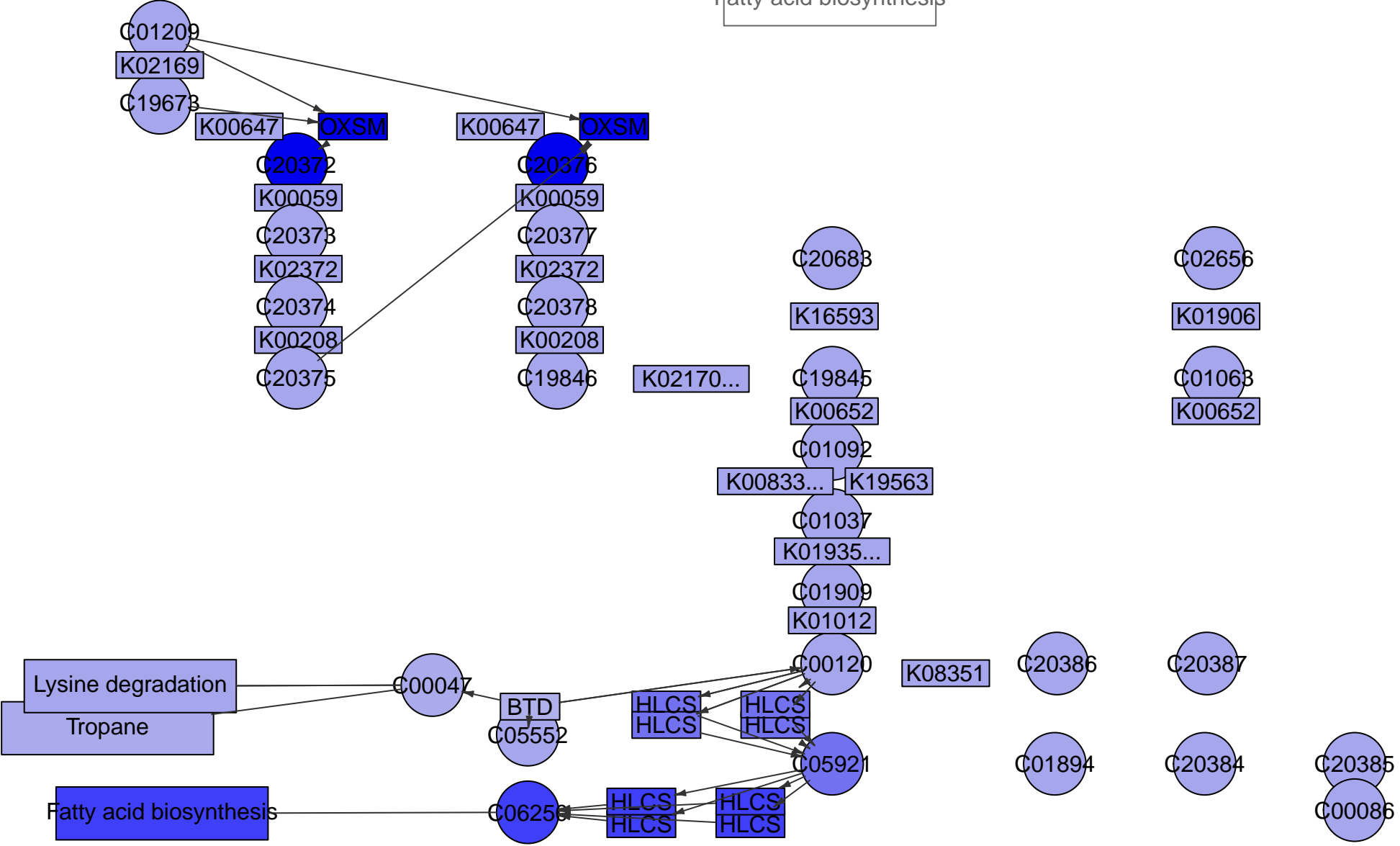
Biotin metabolism  
MPI-185

Fatty acid biosynthesis



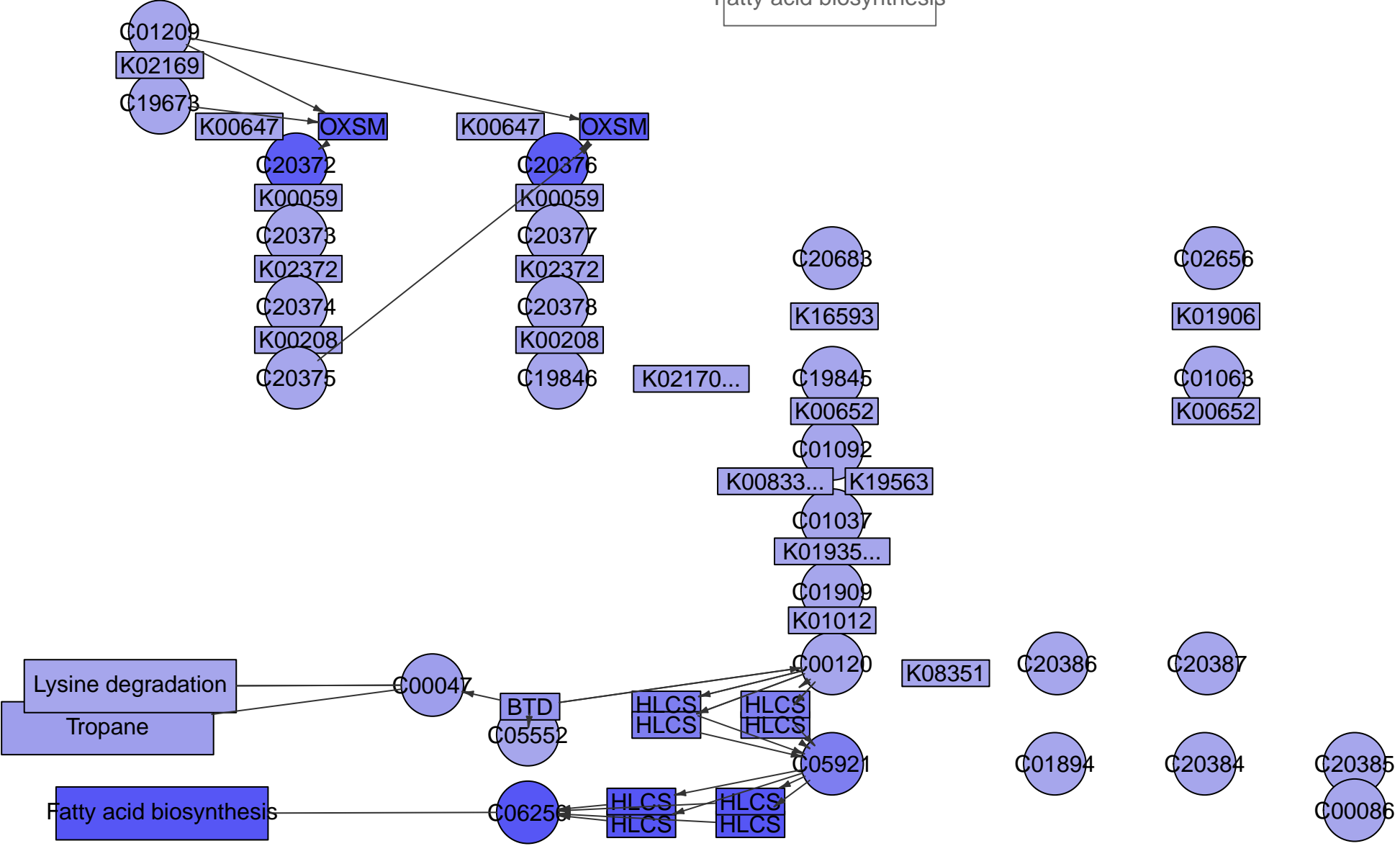
Biotin metabolism  
MPI-186

Fatty acid biosynthesis



Biotin metabolism  
MPI-188

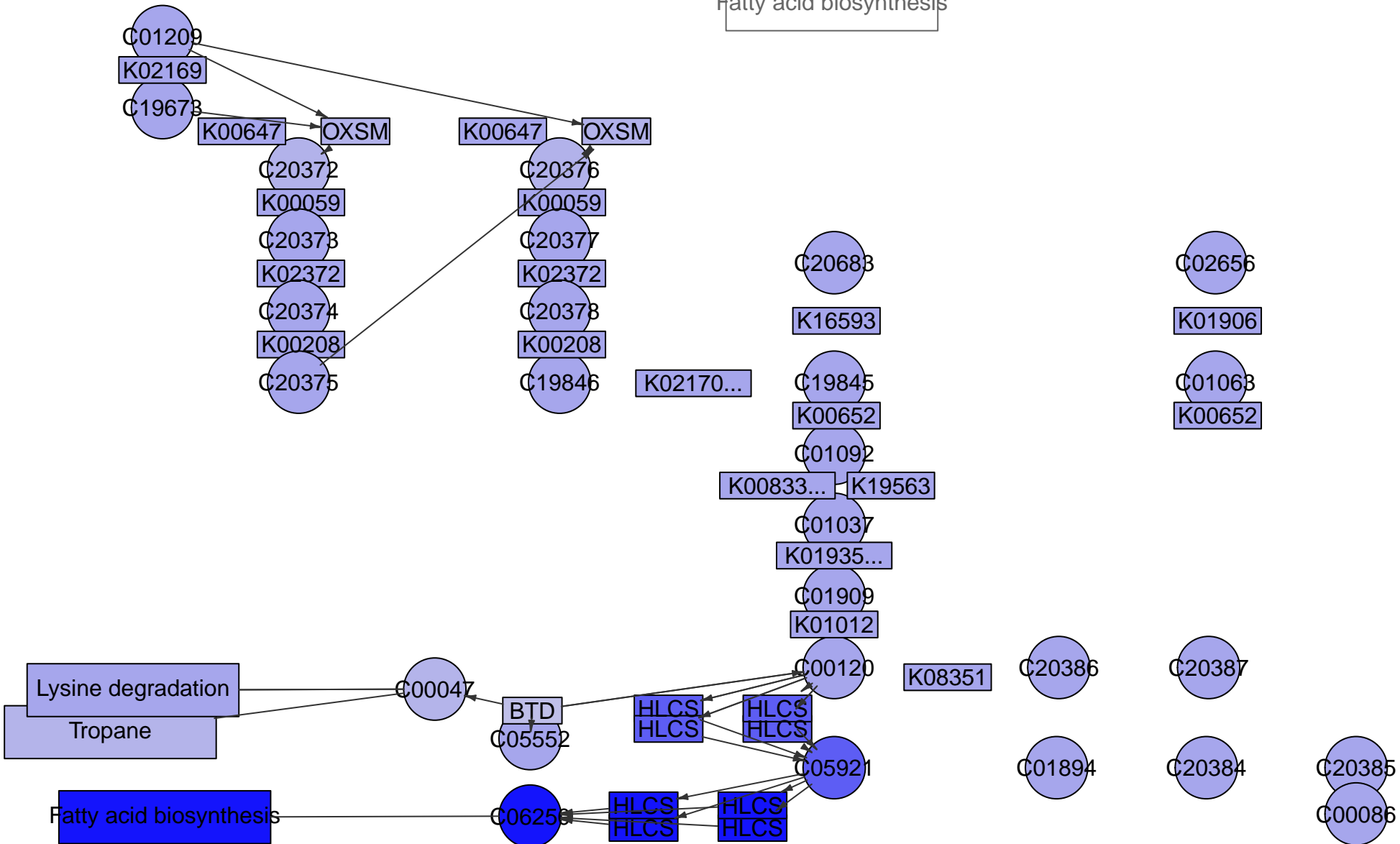
Fatty acid biosynthesis





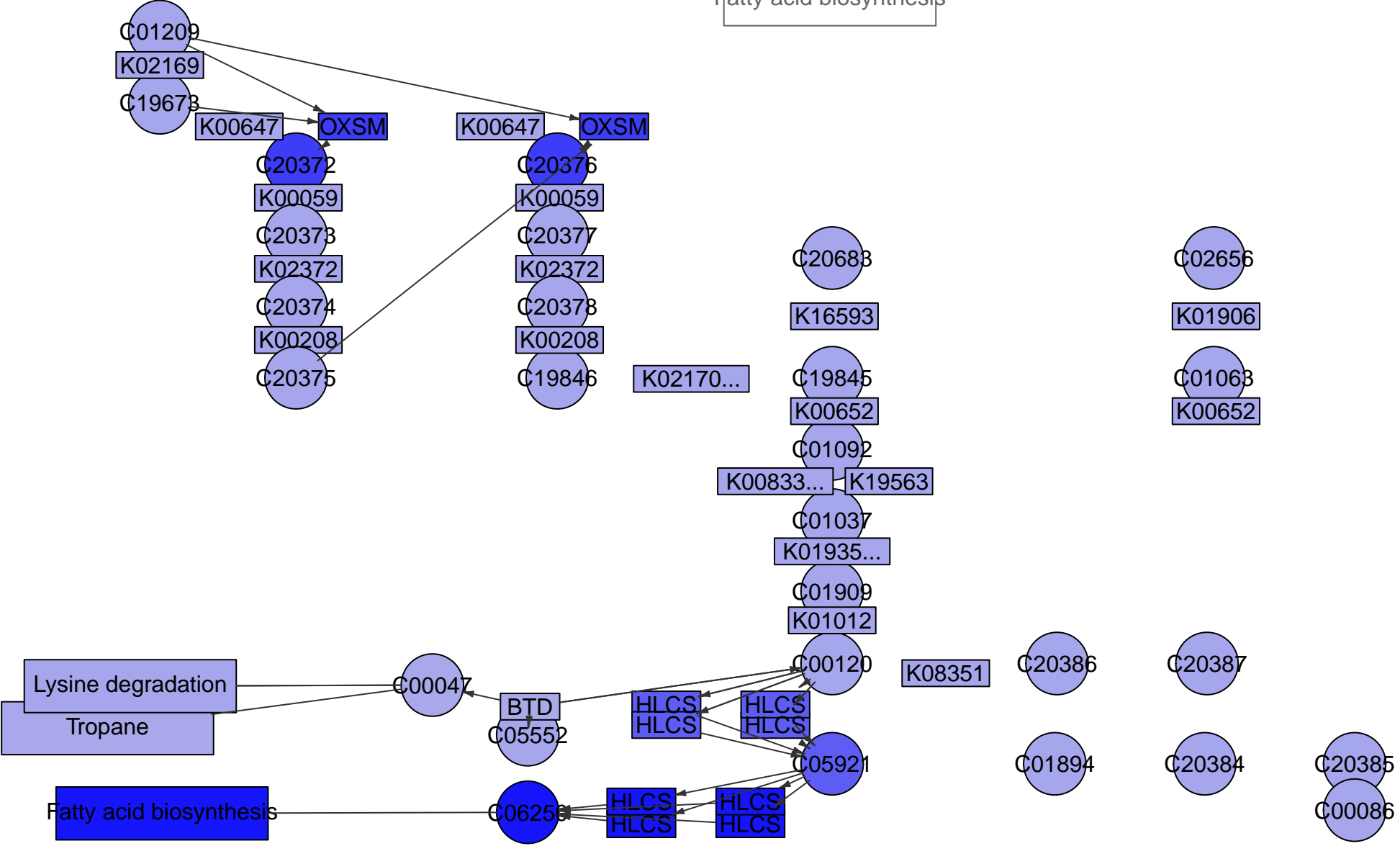
Biotin metabolism  
MPI-189

Fatty acid biosynthesis



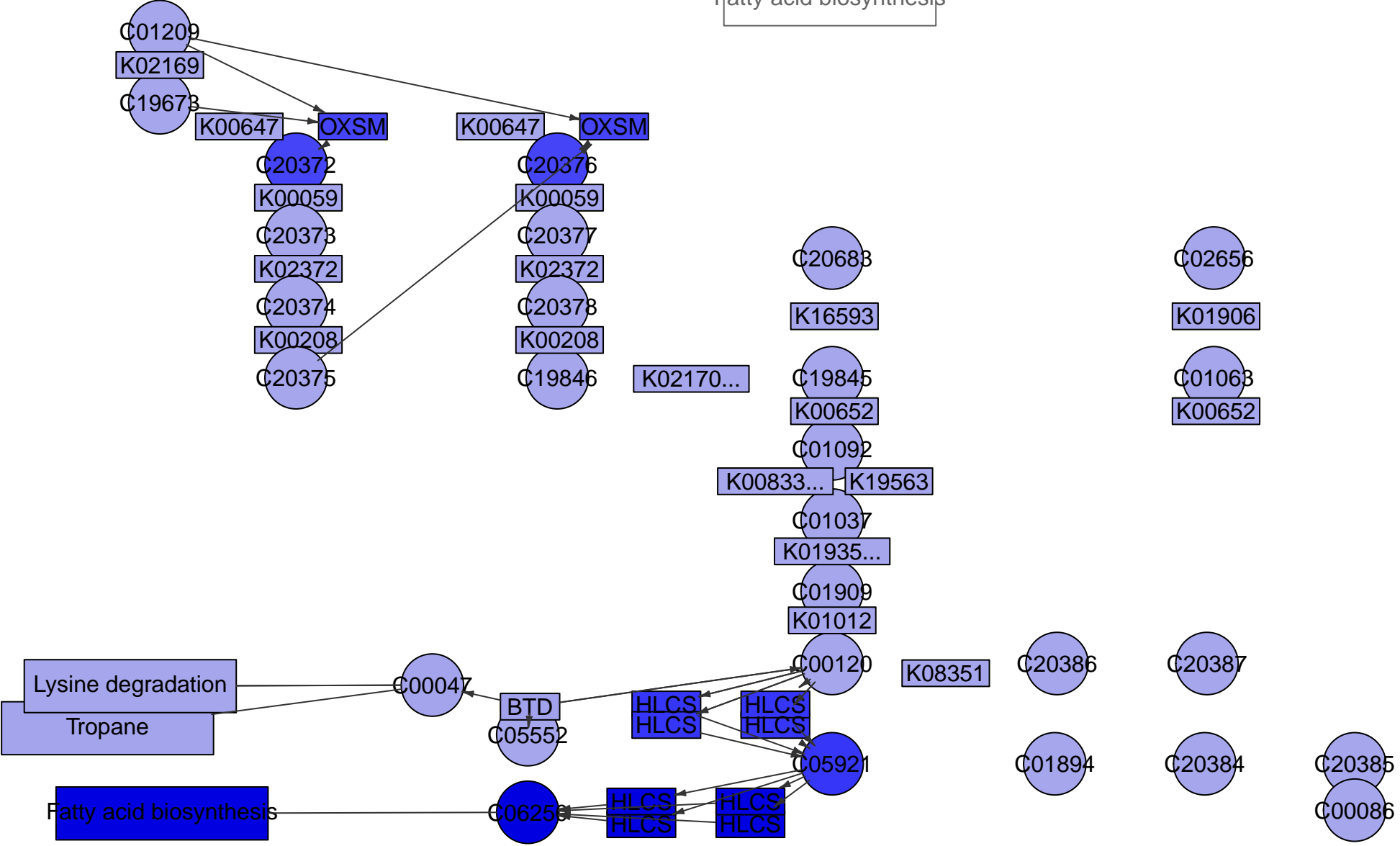
Biotin metabolism  
MPI-190

Fatty acid biosynthesis



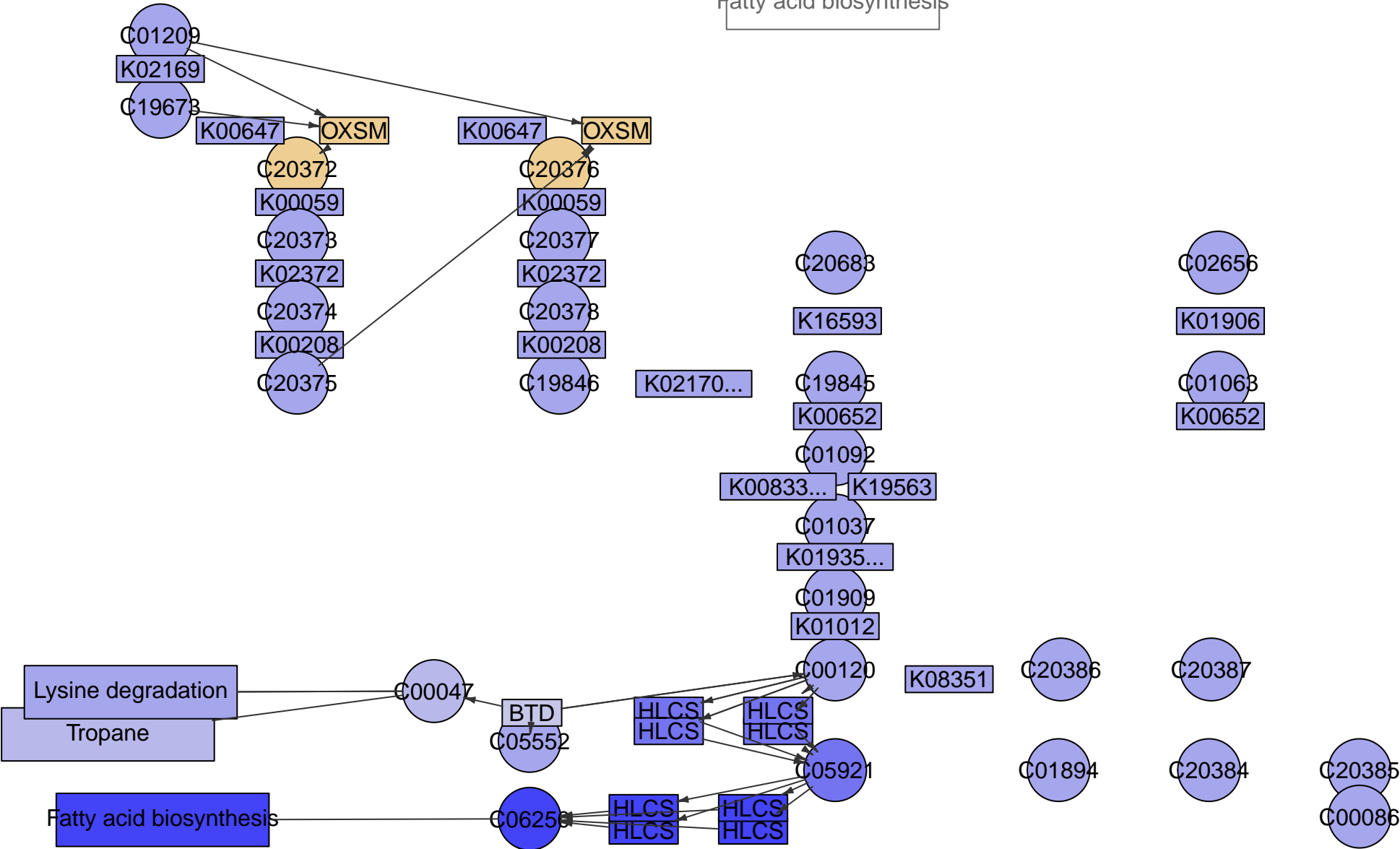
Biotin metabolism  
MPI-191

Fatty acid biosynthesis



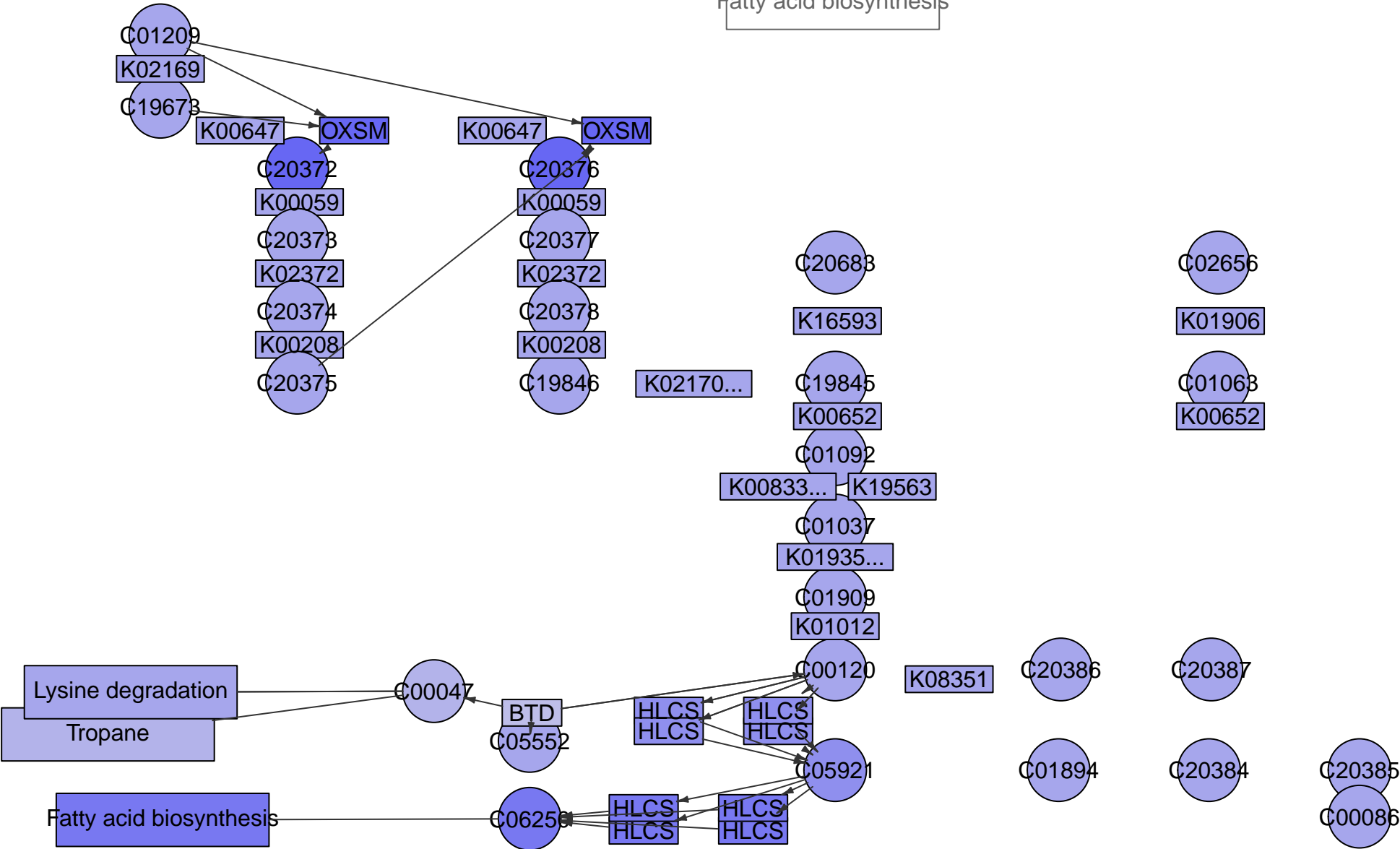
Biotin metabolism  
MPI-192

Fatty acid biosynthesis



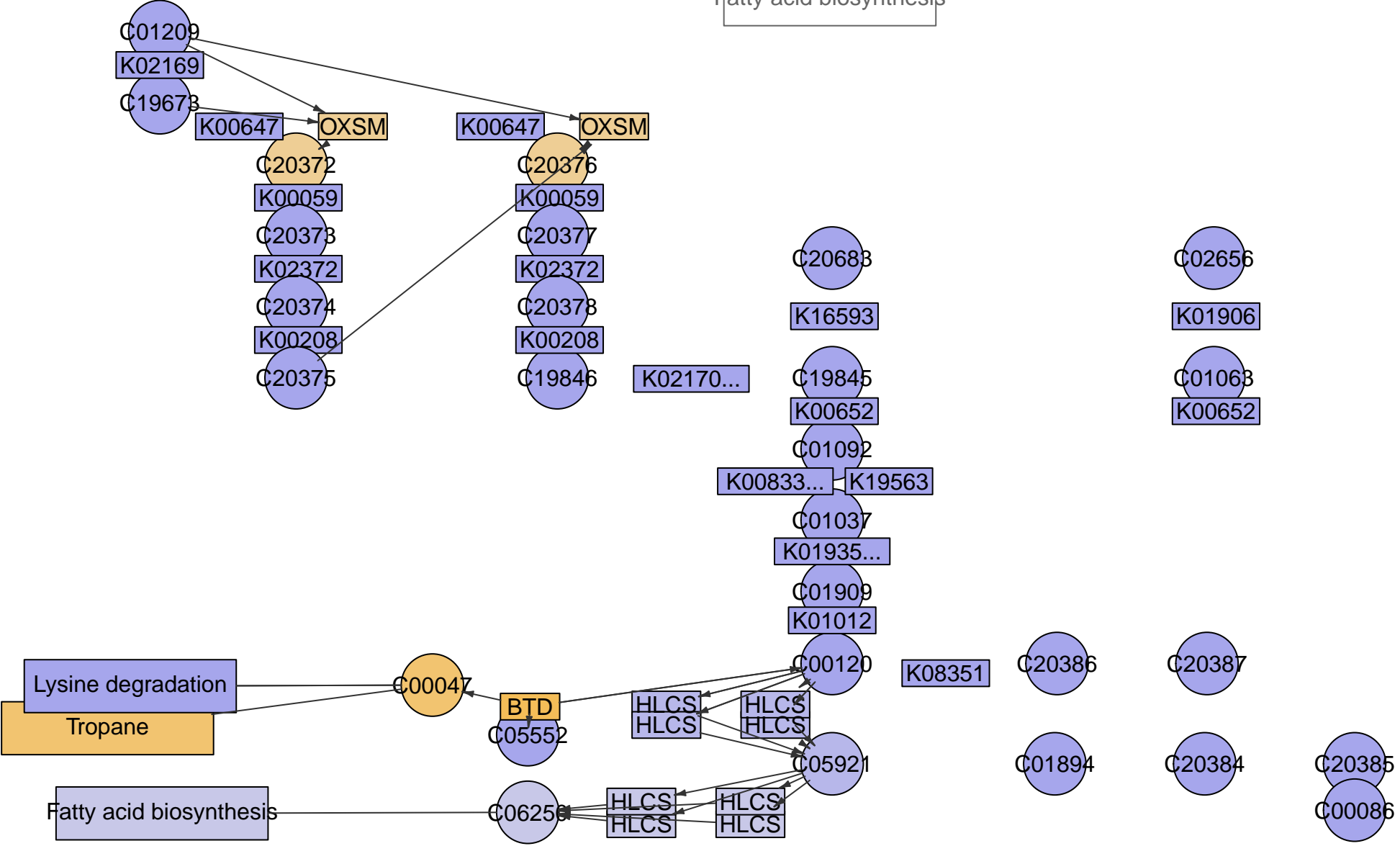
Biotin metabolism  
MPI-194

Fatty acid biosynthesis



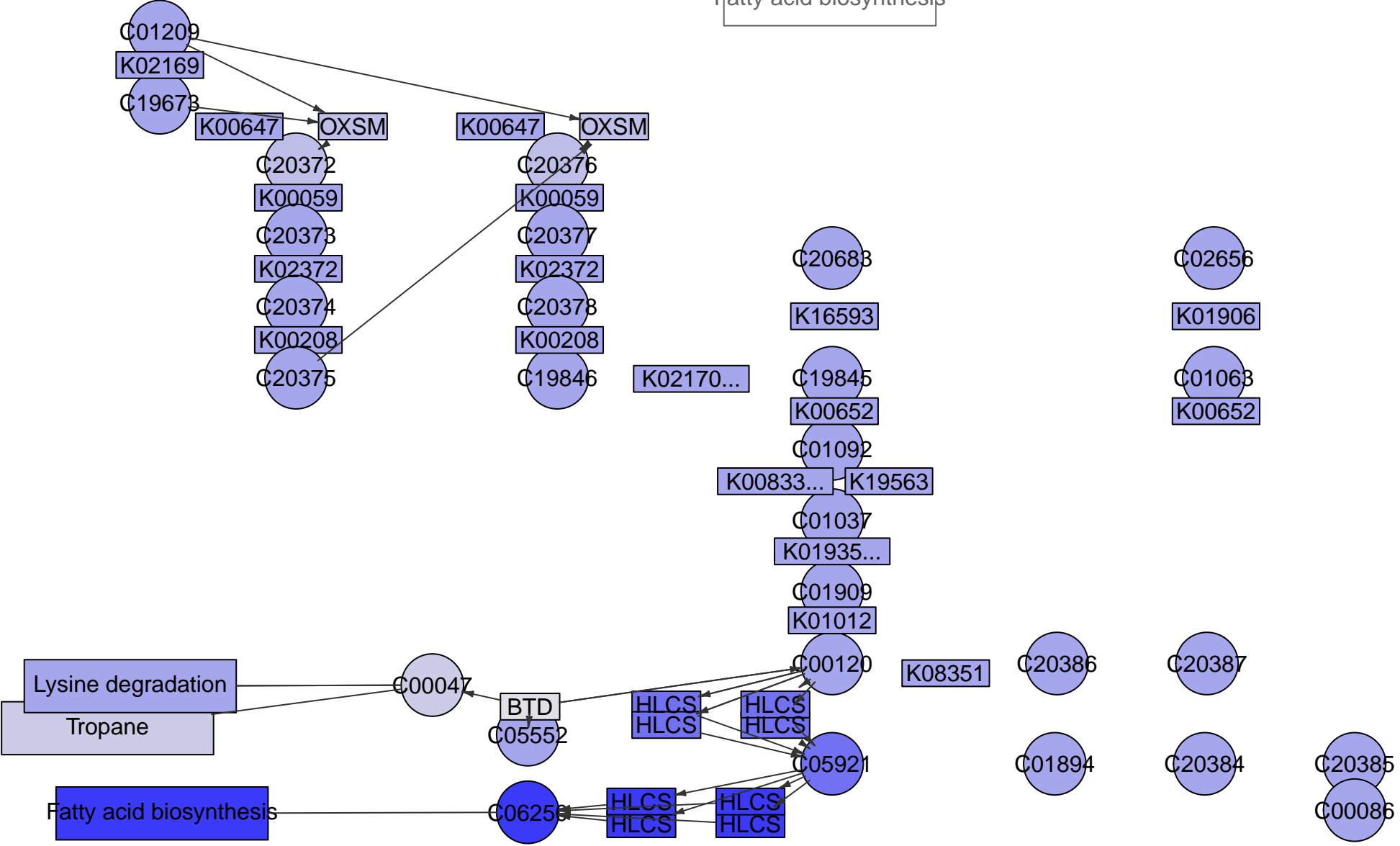
Biotin metabolism  
MPI-195

Fatty acid biosynthesis



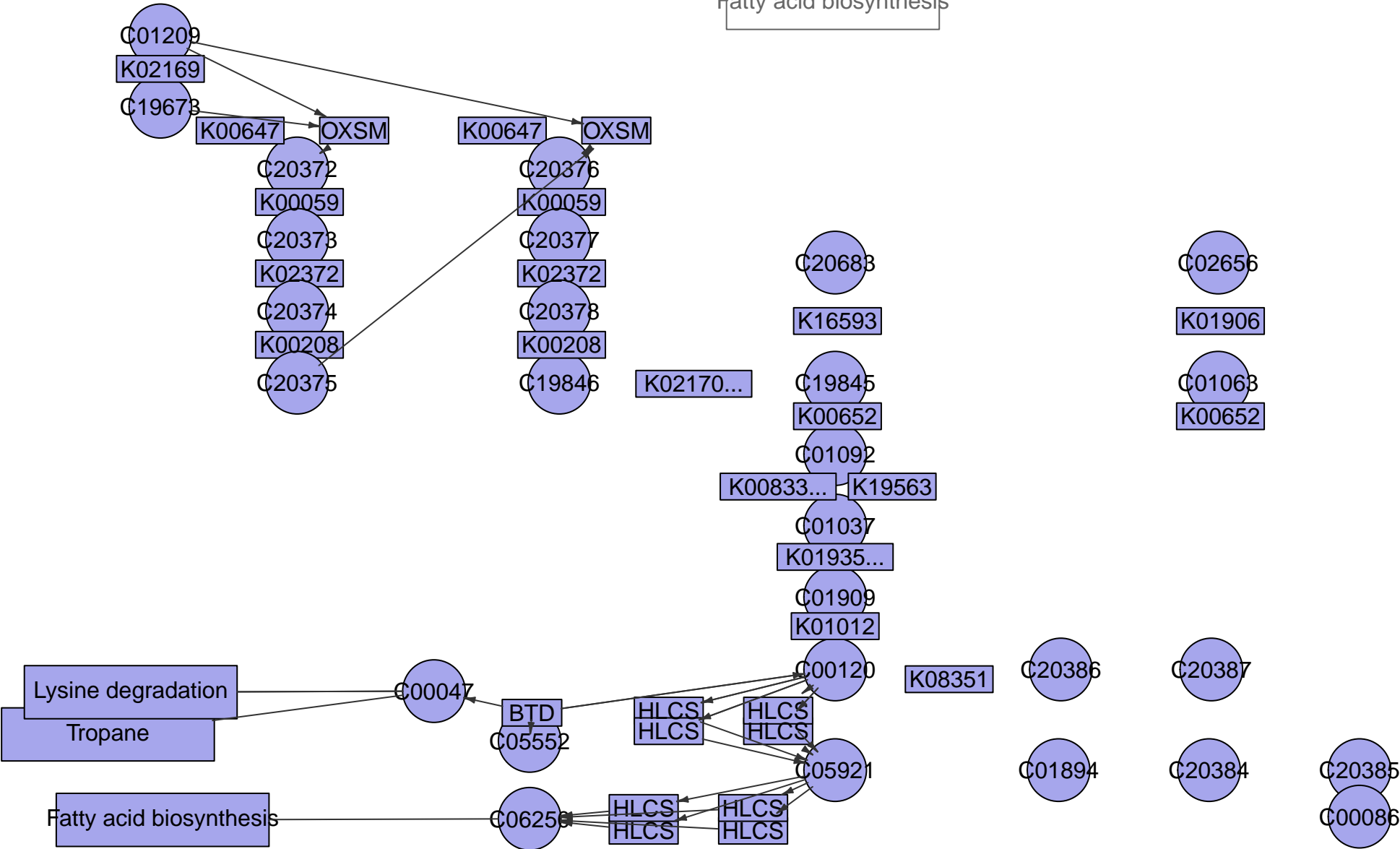
Biotin metabolism  
MPI-196

Fatty acid biosynthesis



Biotin metabolism  
MPI-198

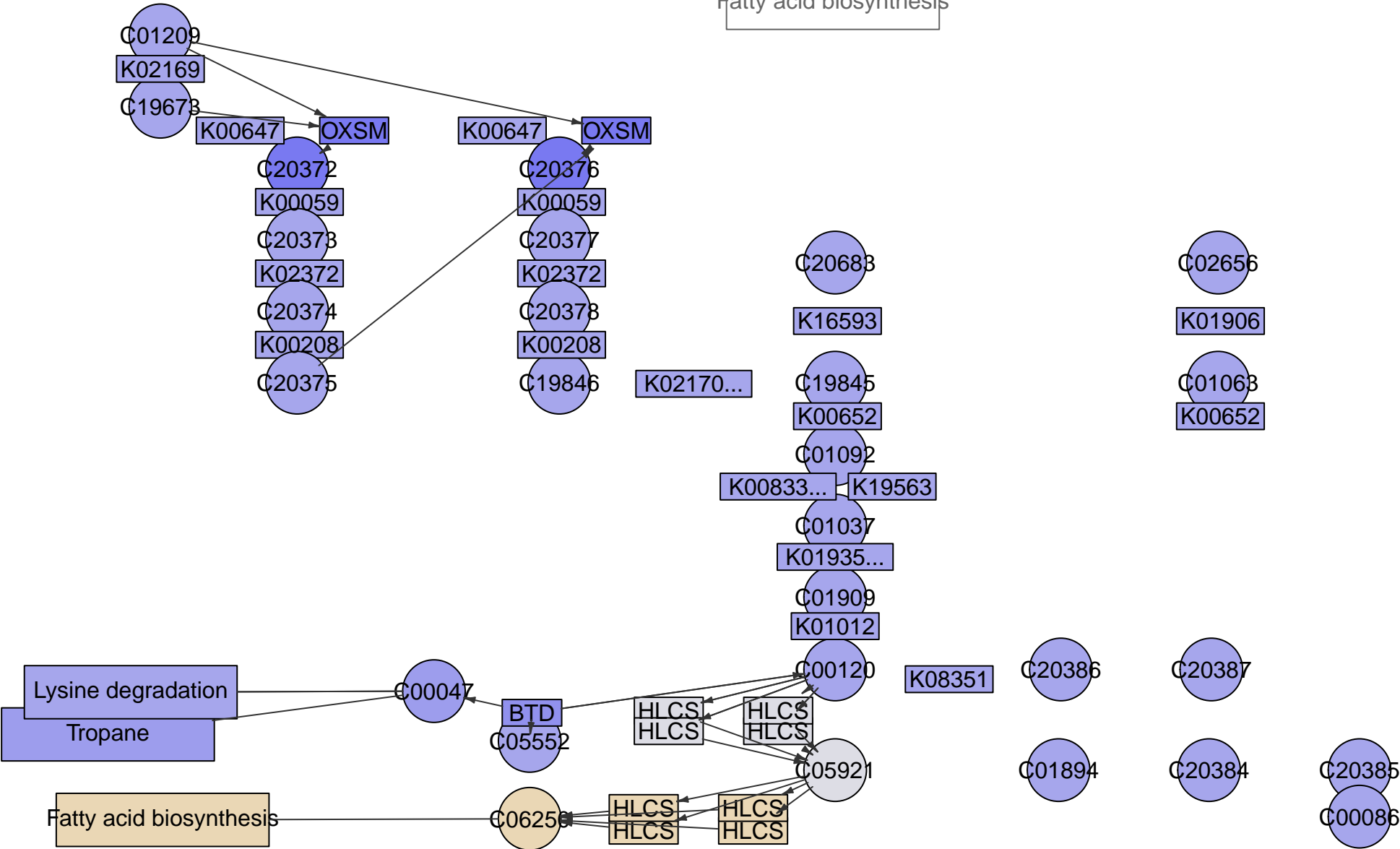
Fatty acid biosynthesis





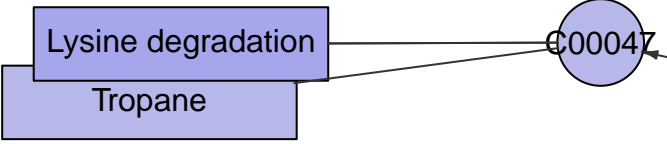
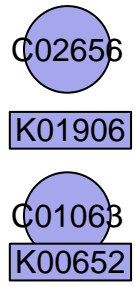
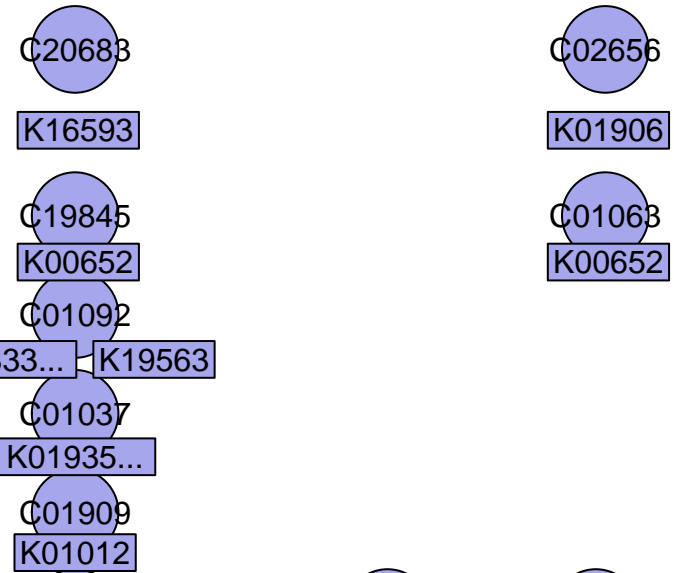
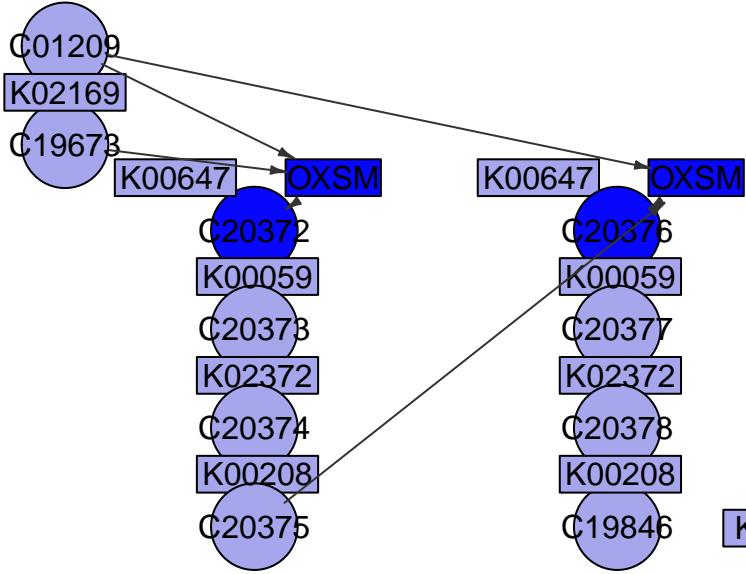
Biotin metabolism  
MPI-199

Fatty acid biosynthesis

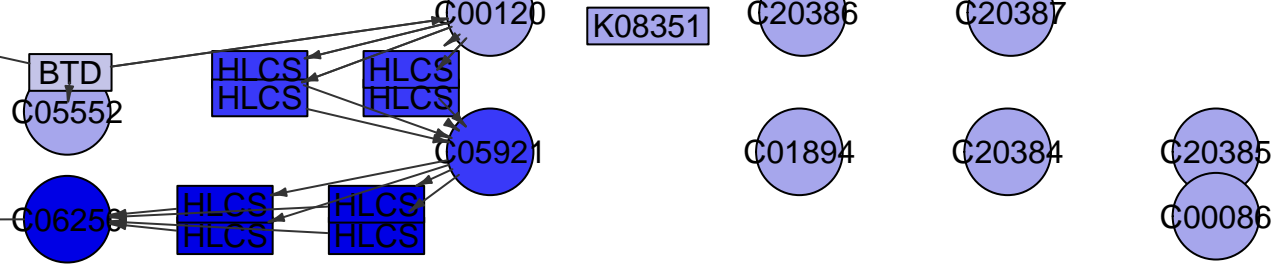


Biotin metabolism  
MPI-200

Fatty acid biosynthesis

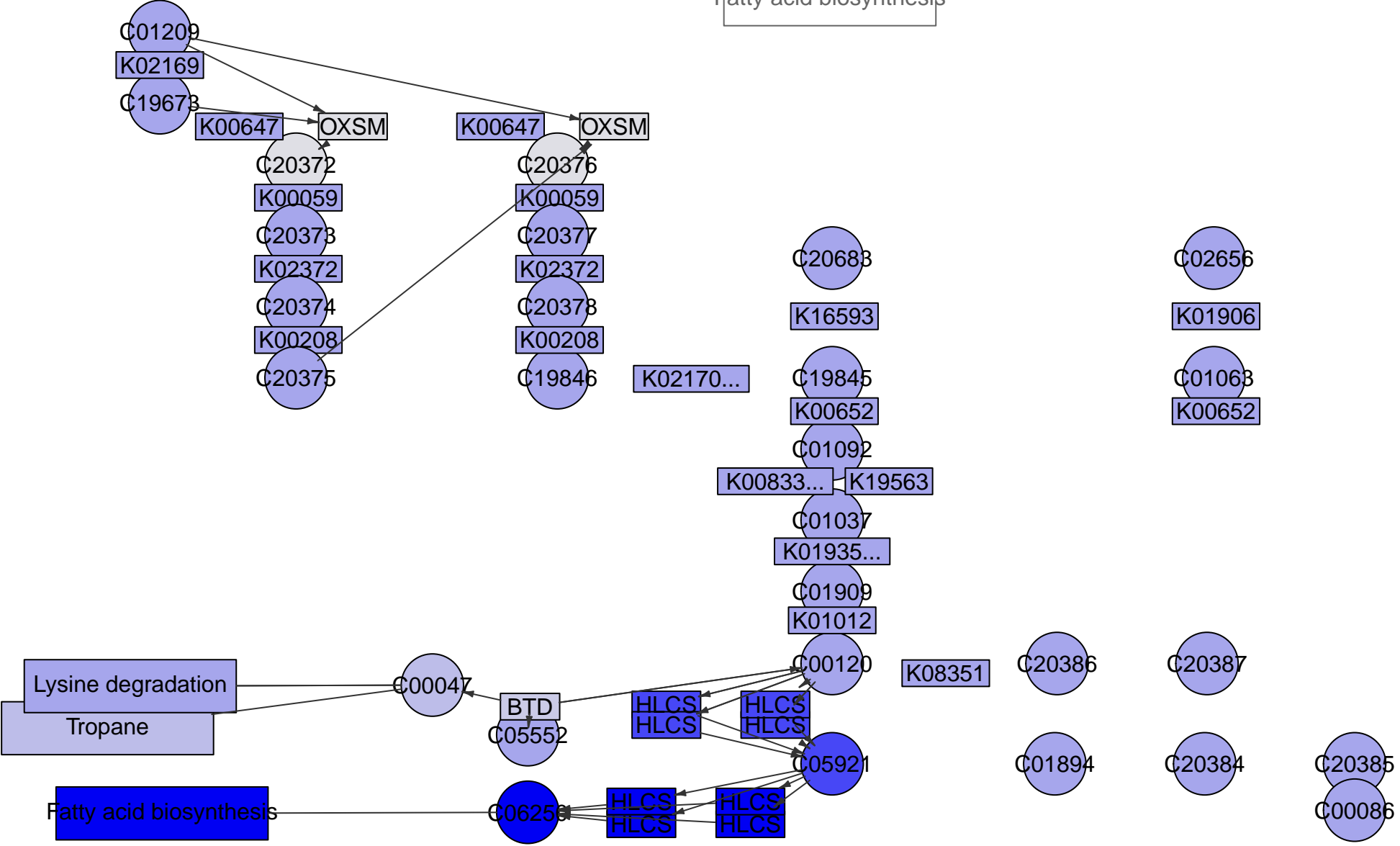


Fatty acid biosynthesis



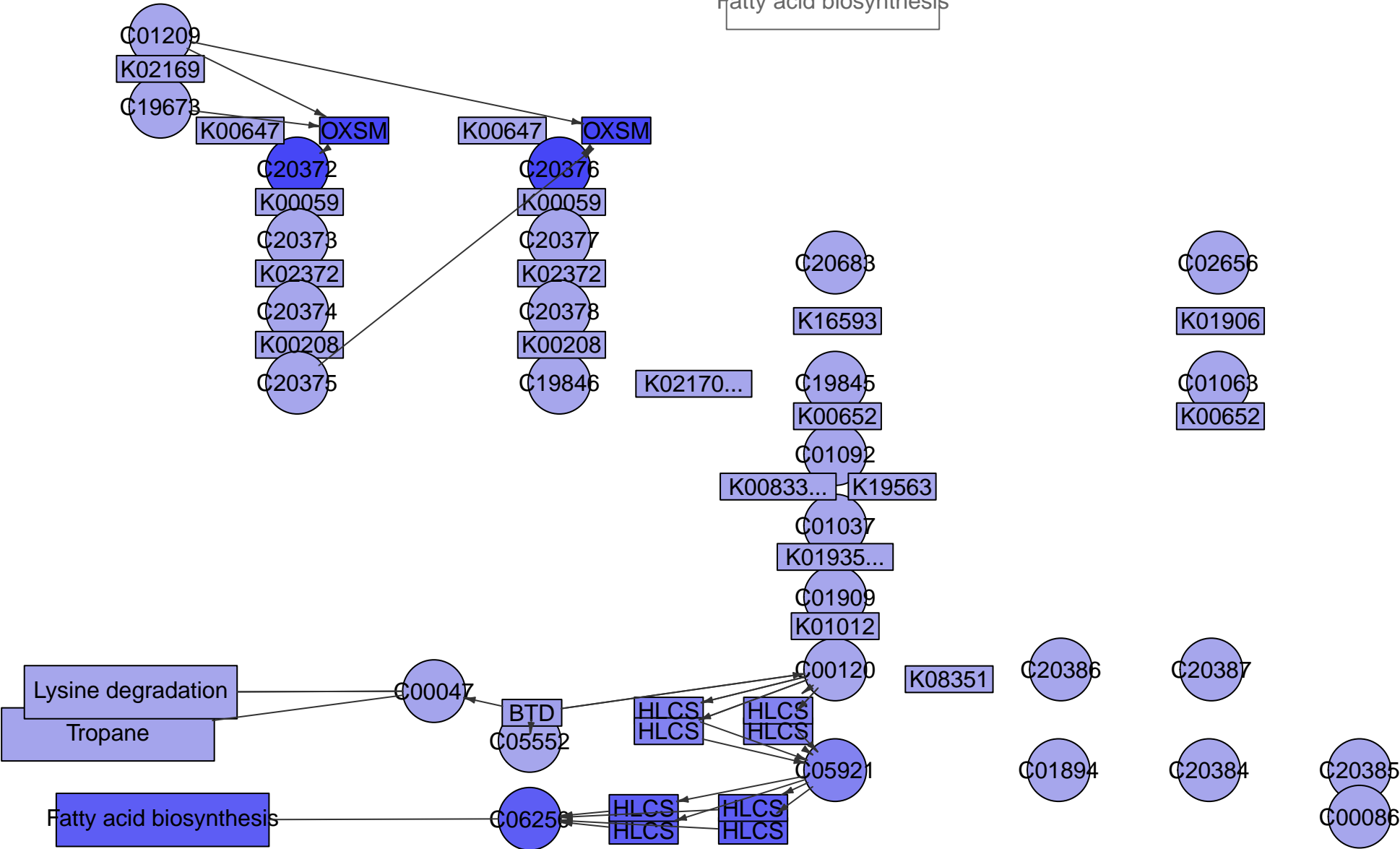
Biotin metabolism  
MPI-201

Fatty acid biosynthesis



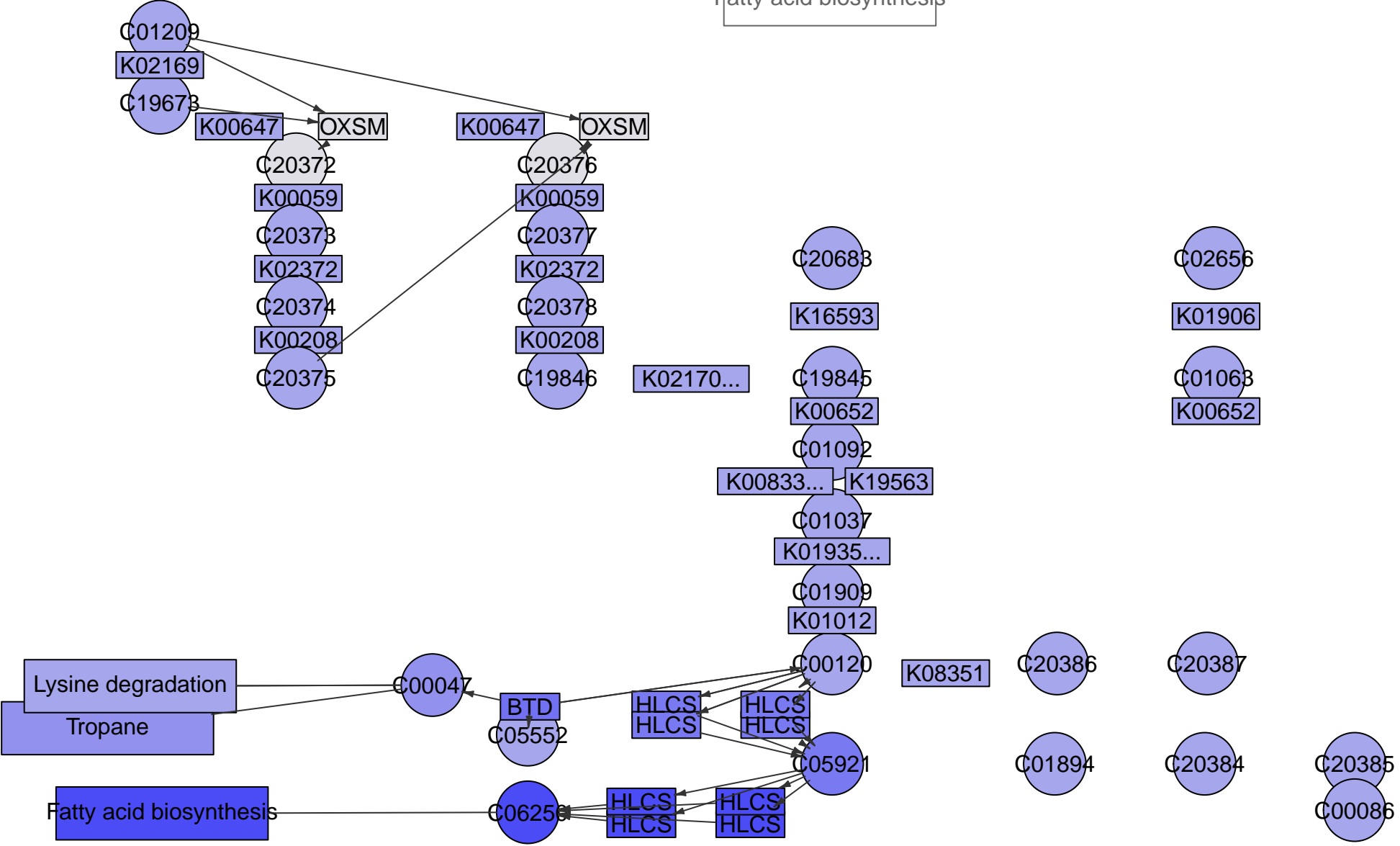
Biotin metabolism  
MPI-202

Fatty acid biosynthesis



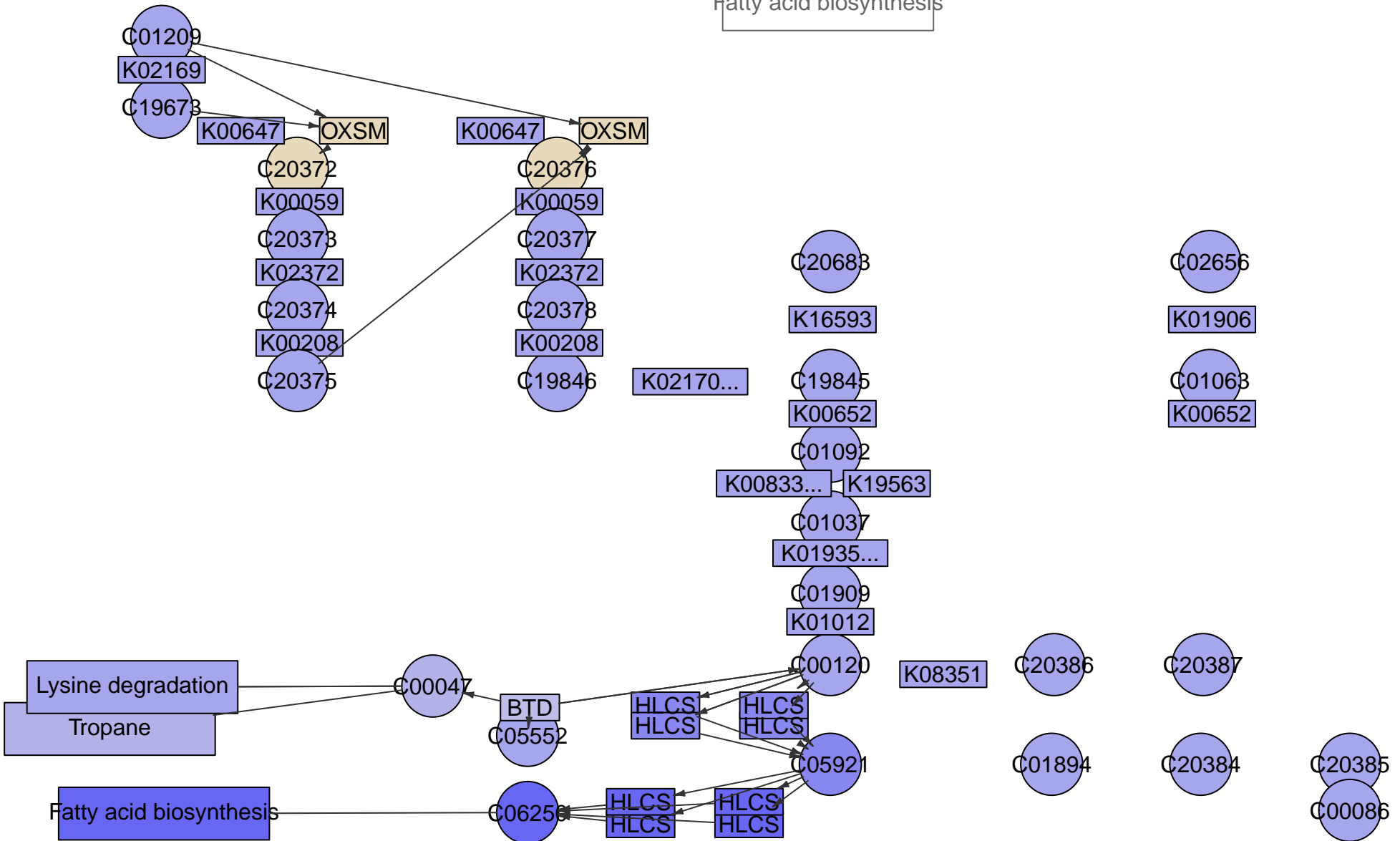
Biotin metabolism  
MPI-203

Fatty acid biosynthesis



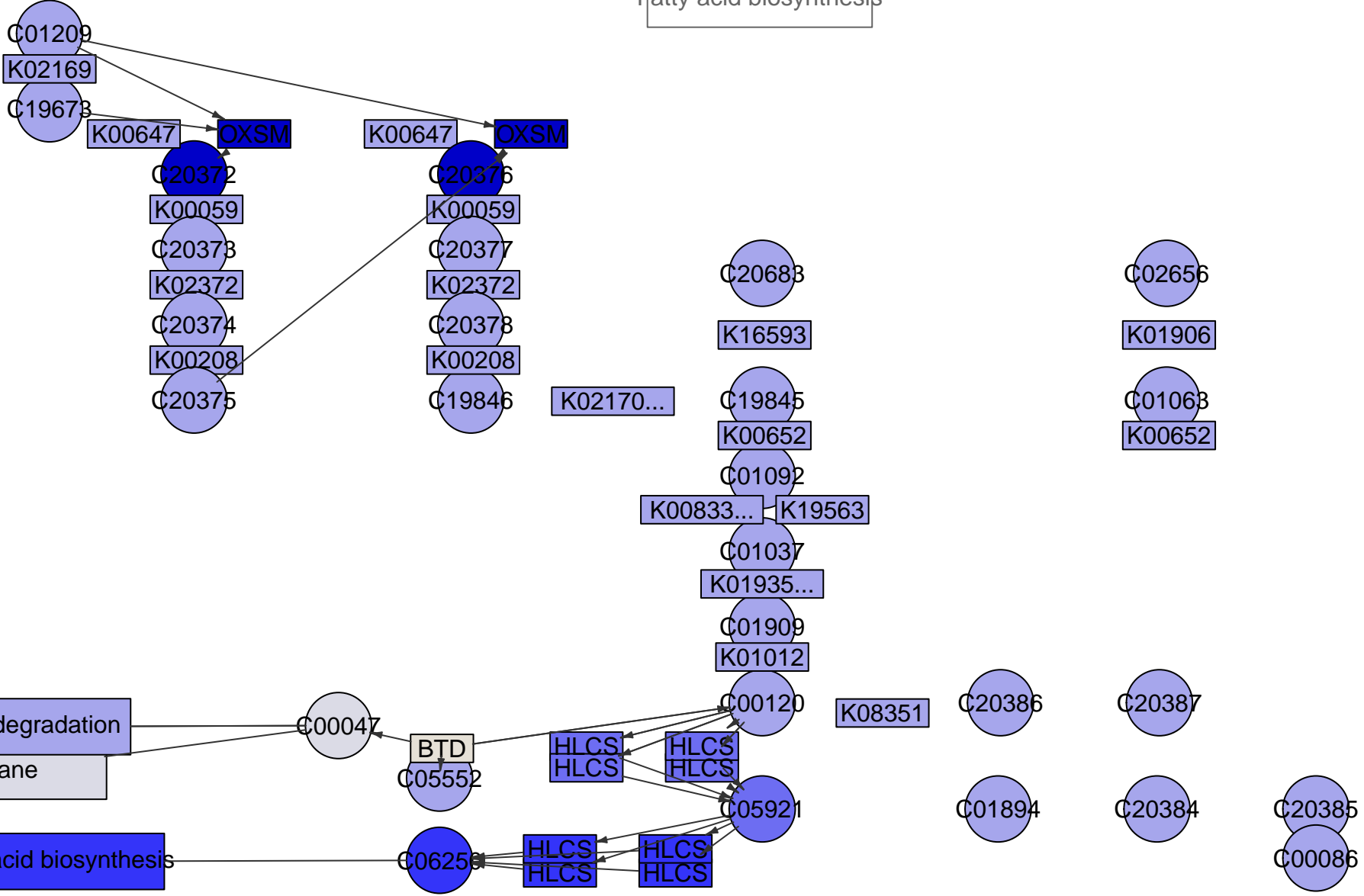
Biotin metabolism  
MPI-204

Fatty acid biosynthesis



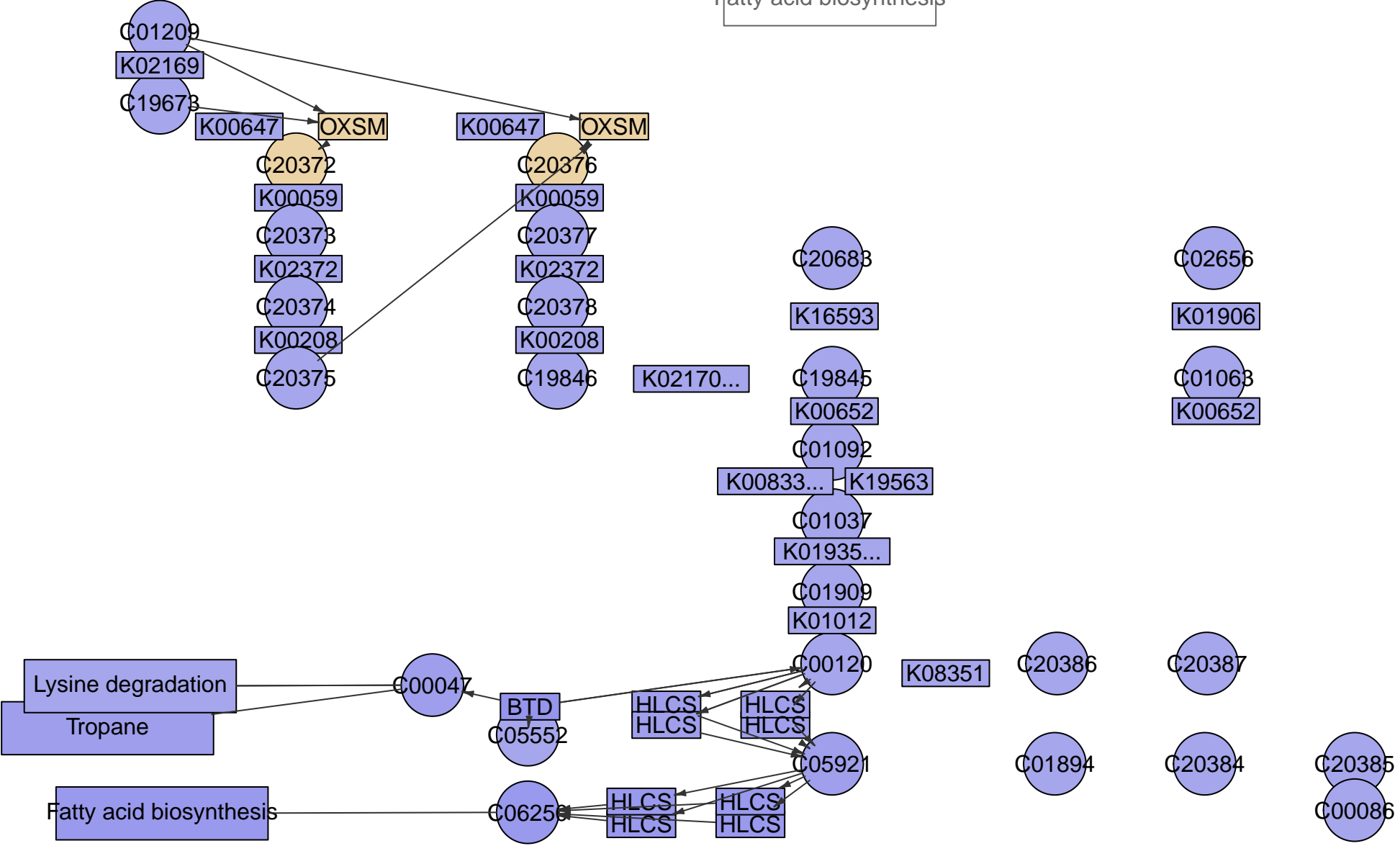
Biotin metabolism  
MPI-205

Fatty acid biosynthesis



Biotin metabolism  
MPI-206

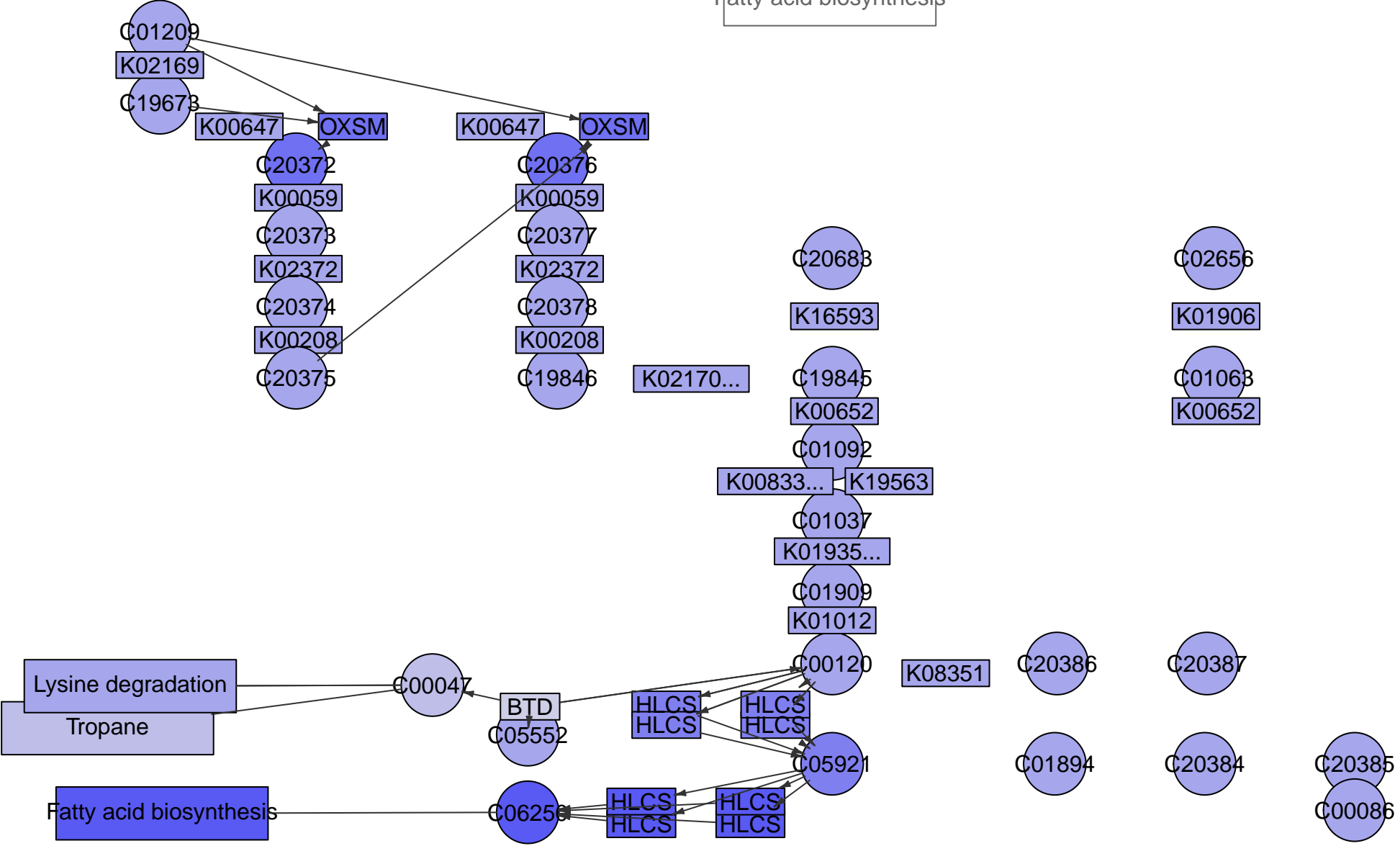
Fatty acid biosynthesis





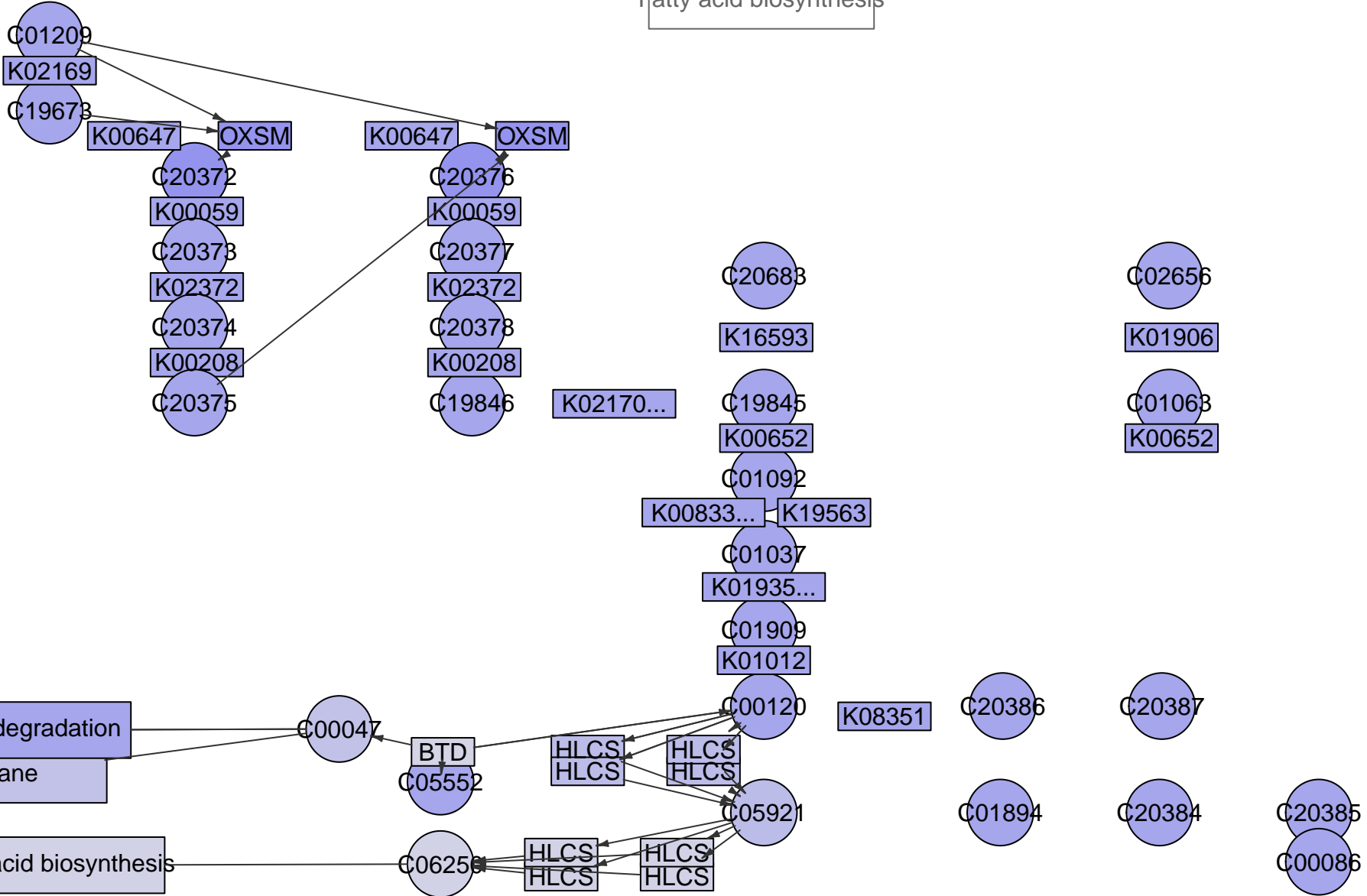
Biotin metabolism  
MPI-207

Fatty acid biosynthesis



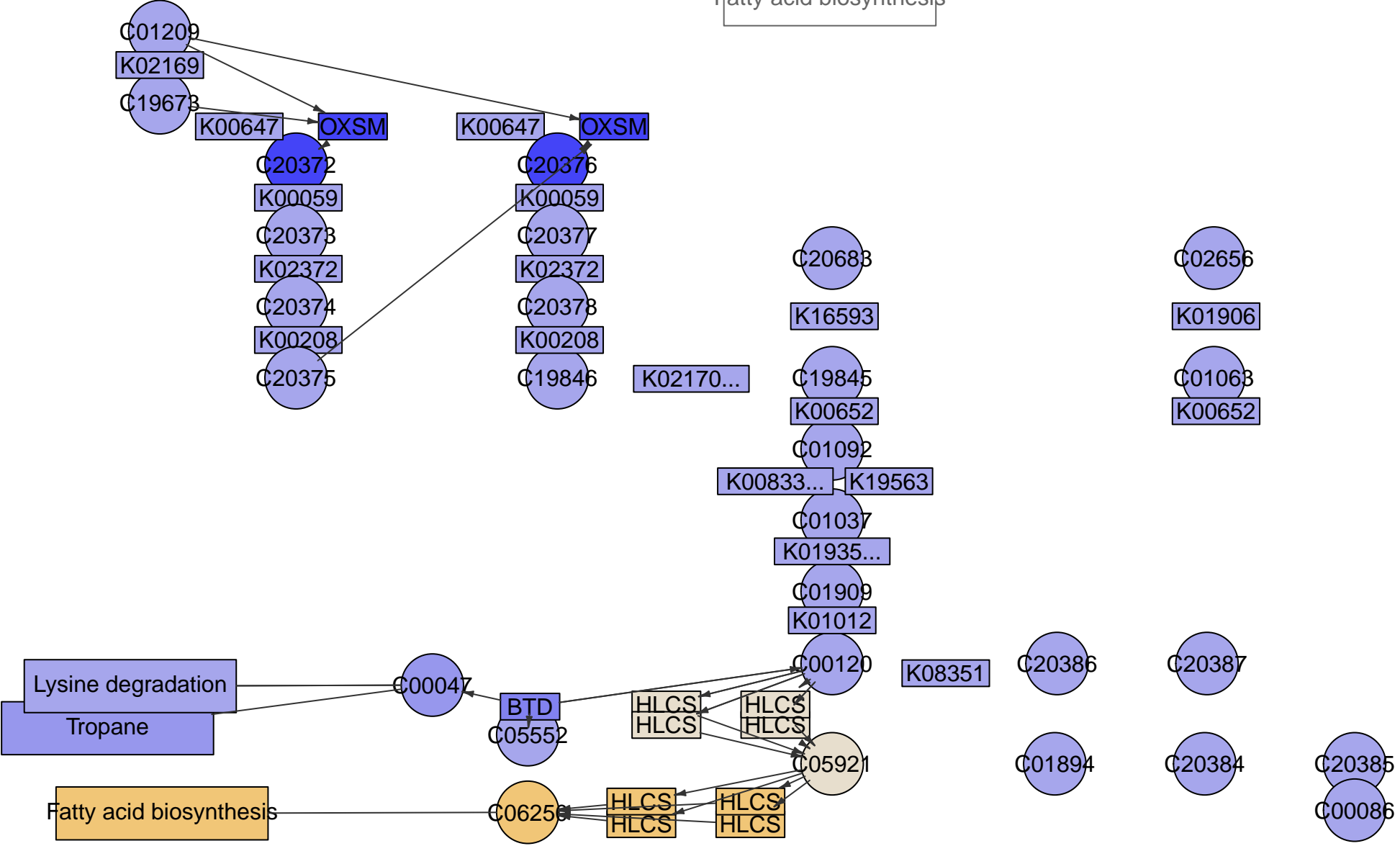
Biotin metabolism  
MPI-208

Fatty acid biosynthesis



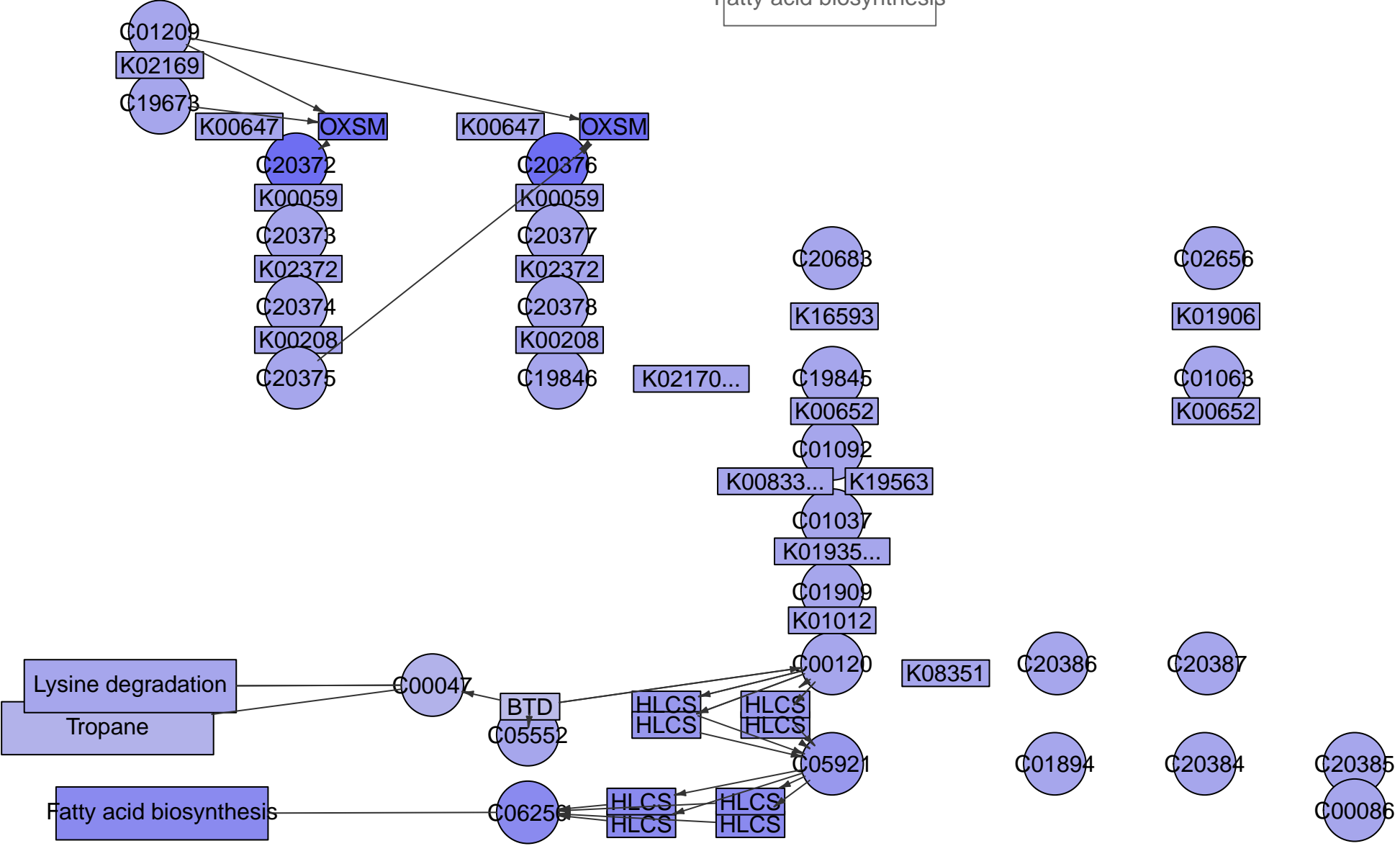
Biotin metabolism  
MPI-209

Fatty acid biosynthesis



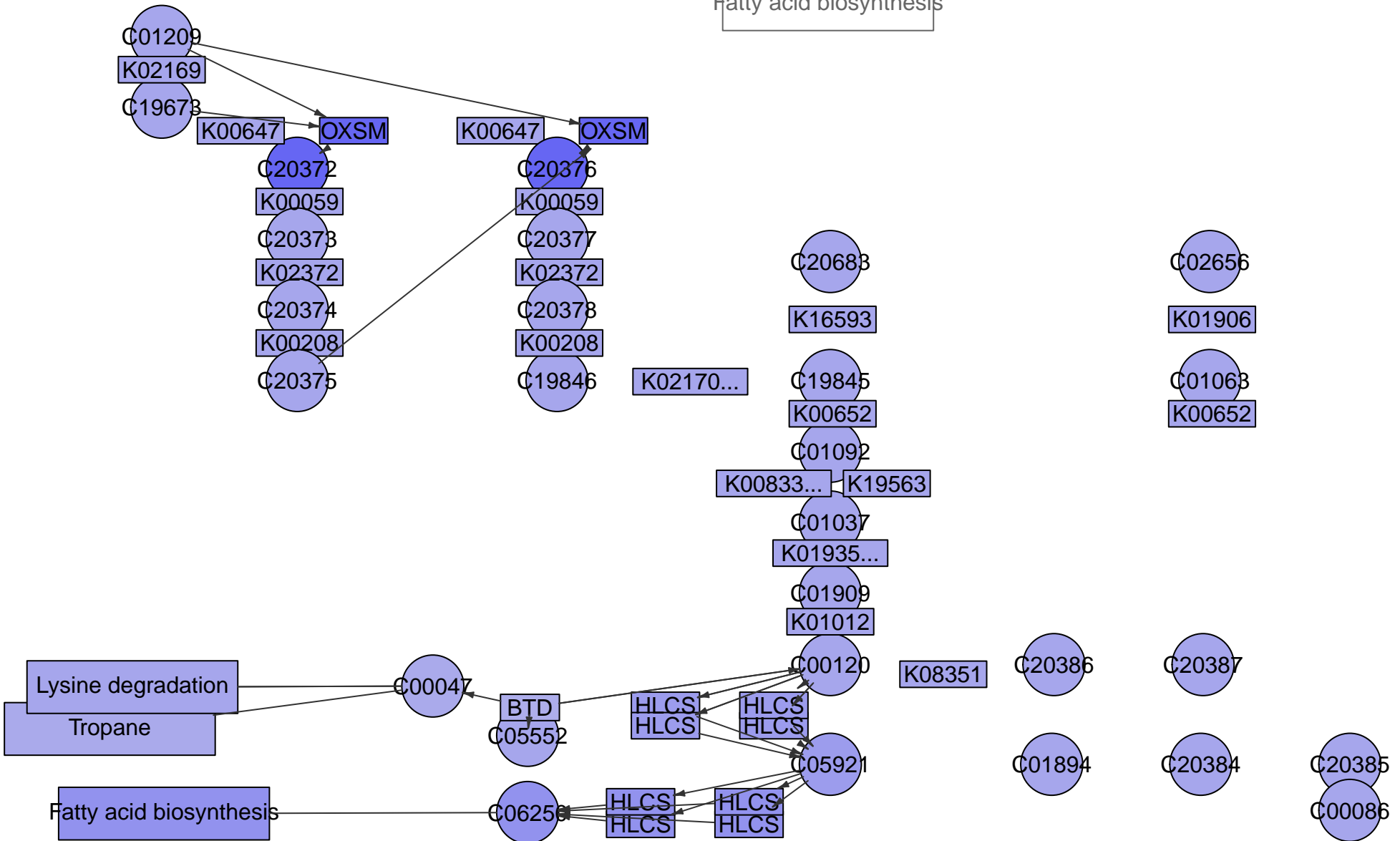
Biotin metabolism  
MPI-210

Fatty acid biosynthesis



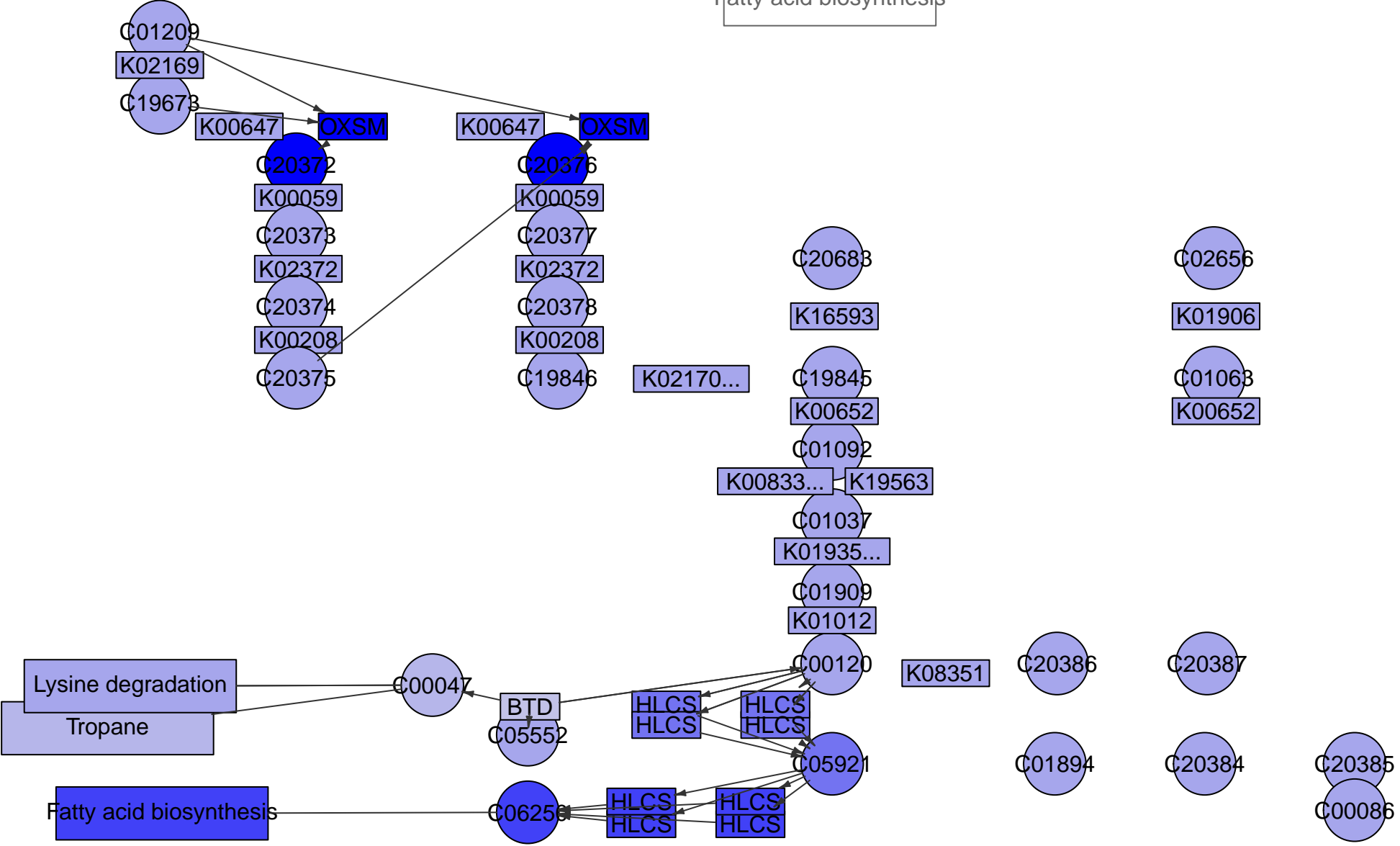
Biotin metabolism  
MPI-212

Fatty acid biosynthesis



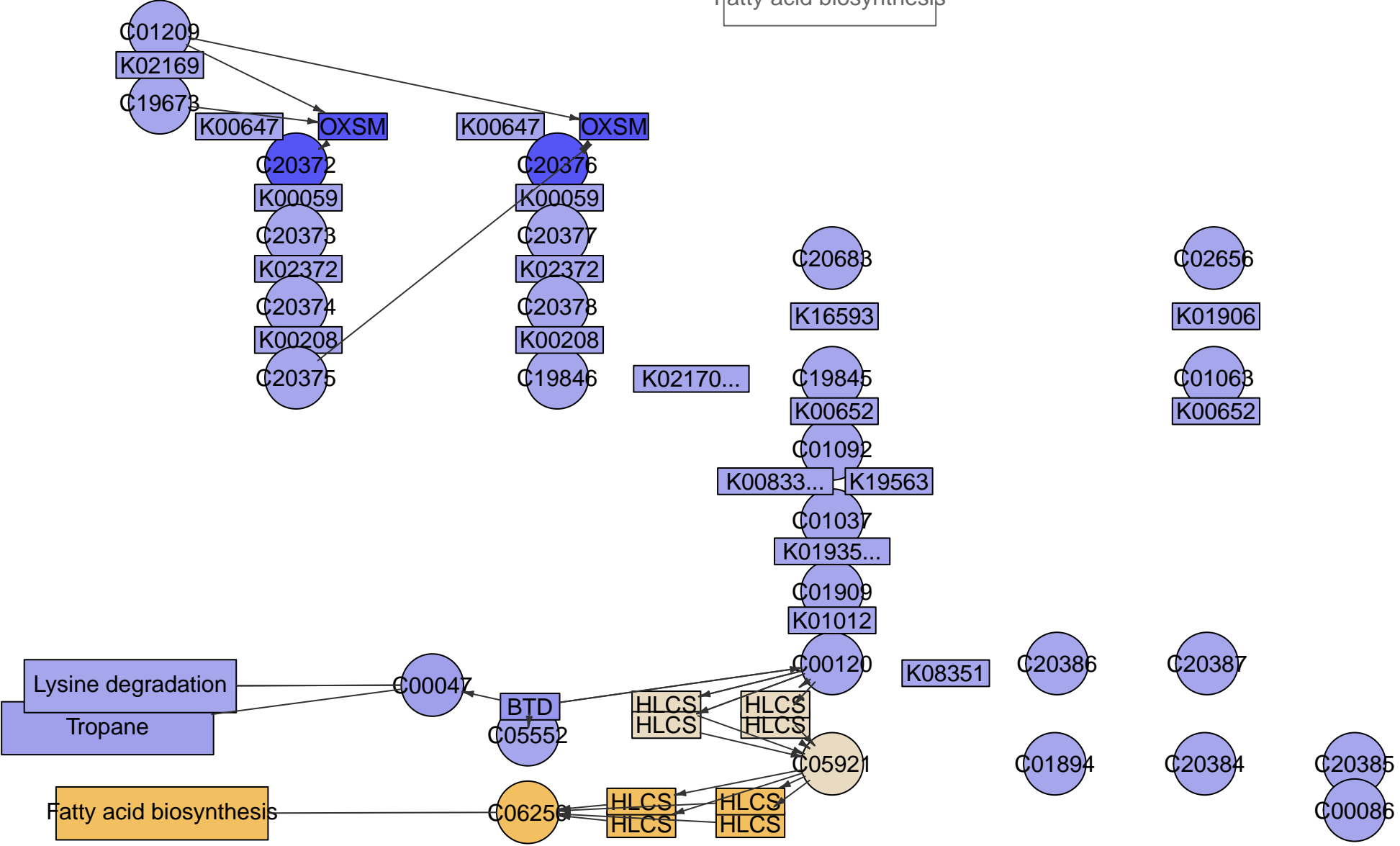
Biotin metabolism  
MPI-213

Fatty acid biosynthesis



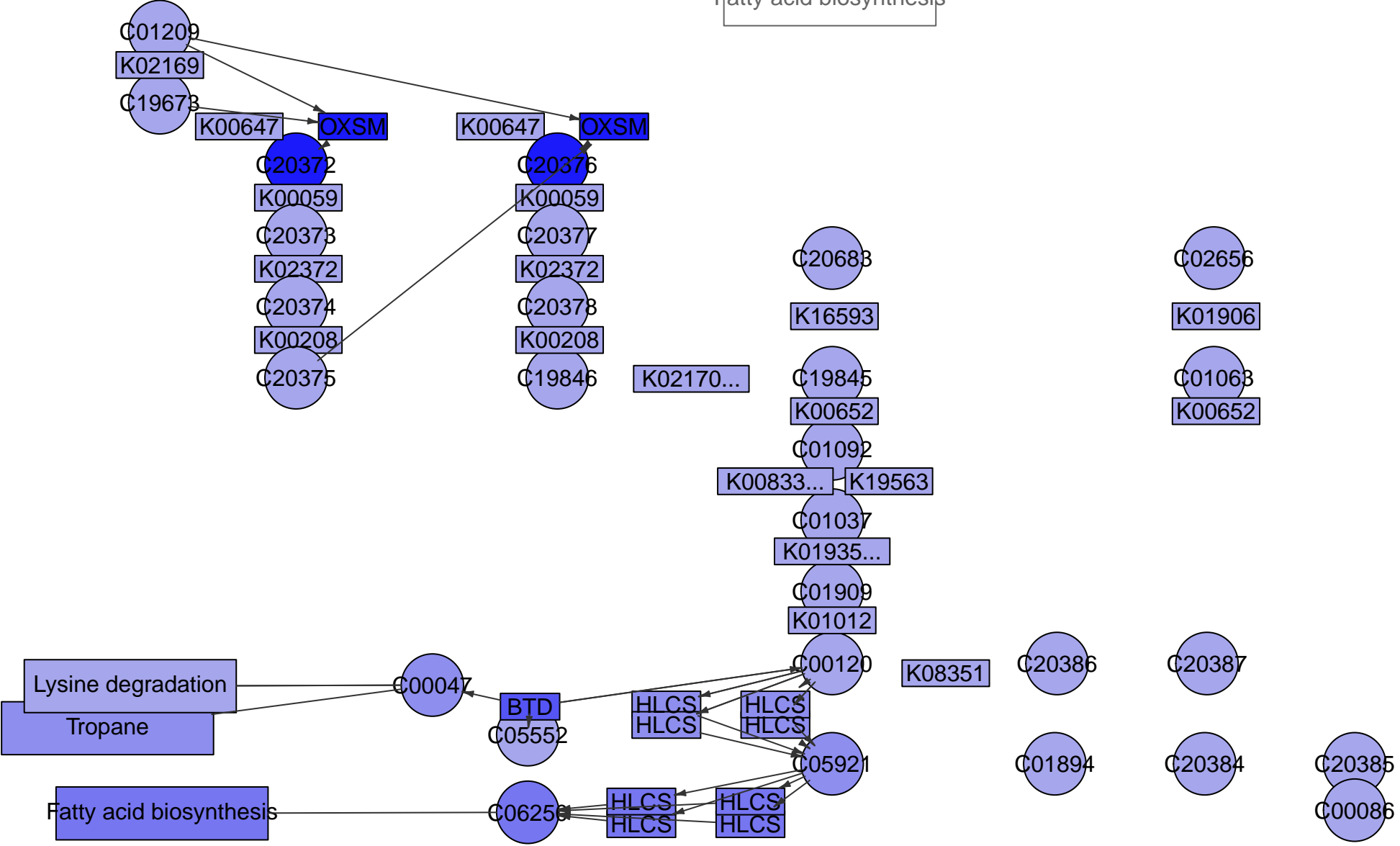
Biotin metabolism  
MPI-215

Fatty acid biosynthesis



Biotin metabolism  
MPI-219

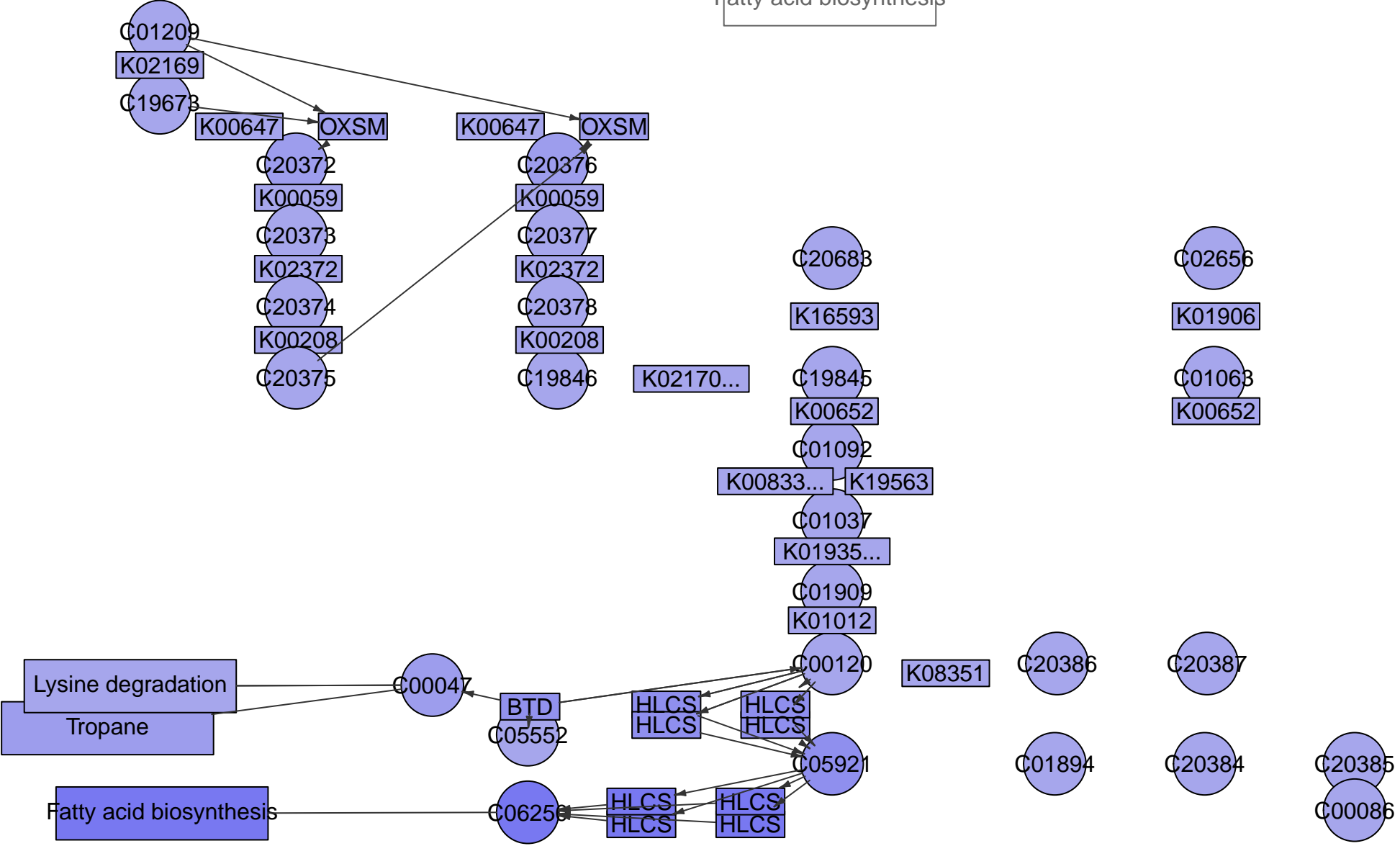
Fatty acid biosynthesis





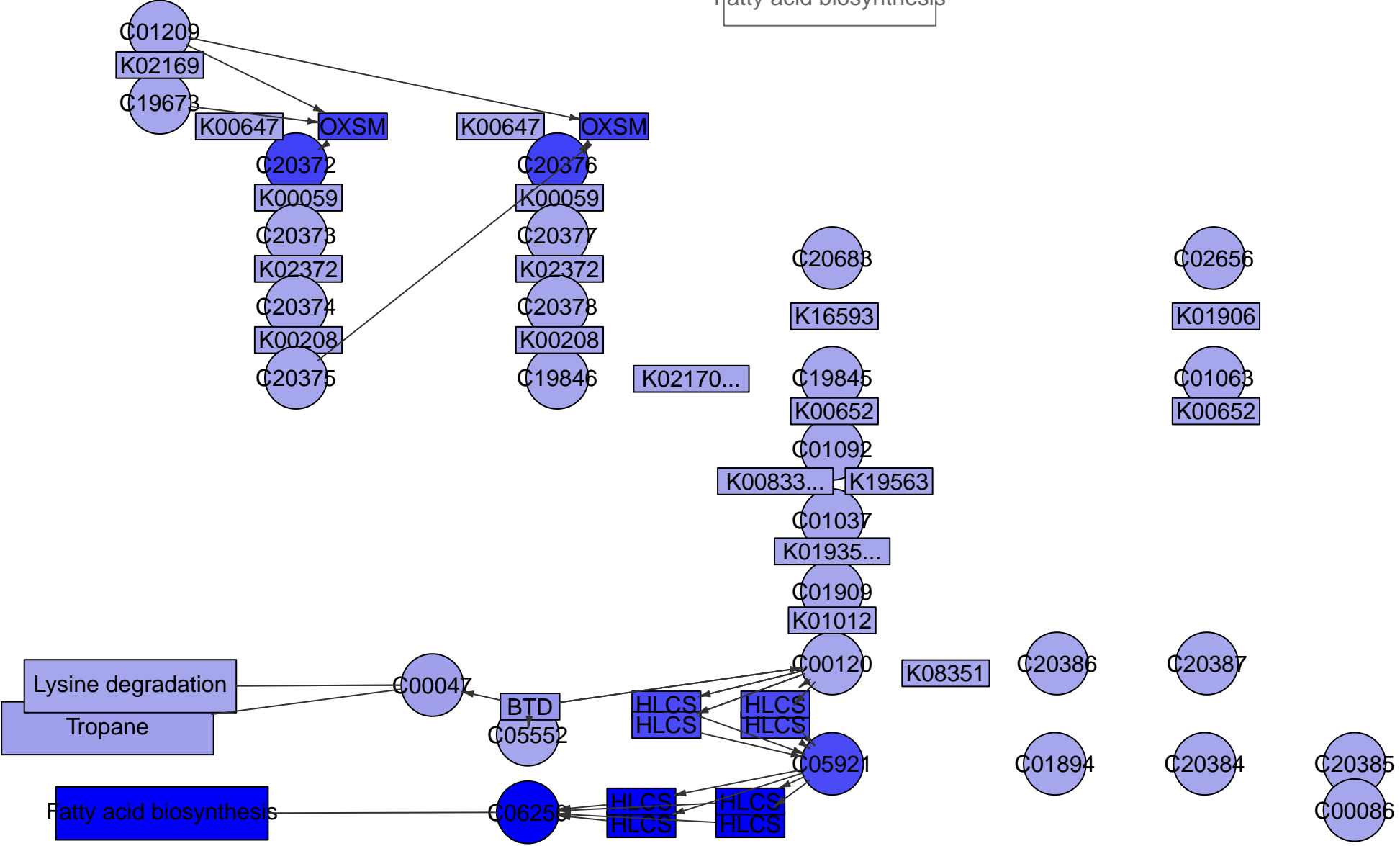
Biotin metabolism  
MPI-221

Fatty acid biosynthesis



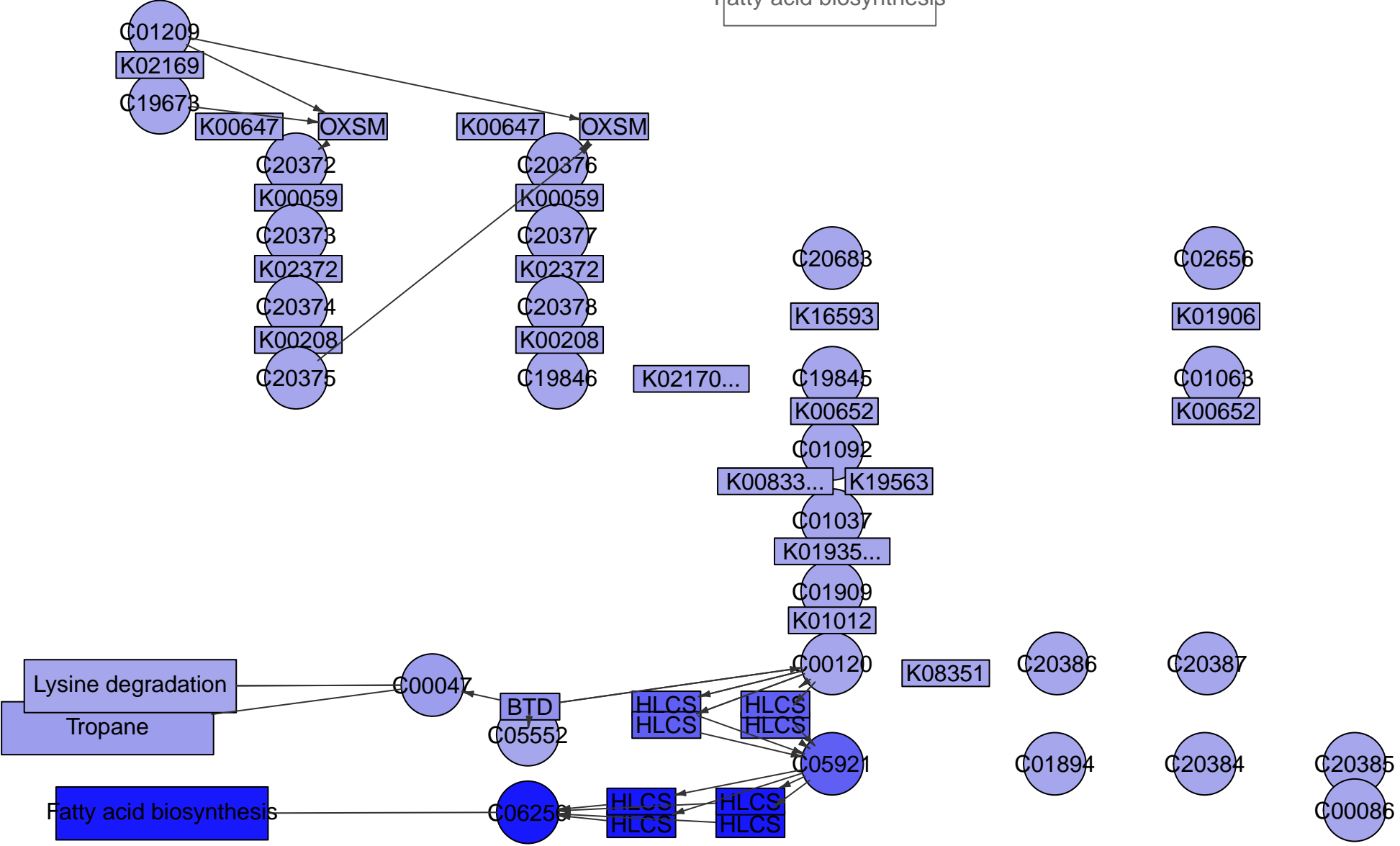
Biotin metabolism  
MPI-223a

Fatty acid biosynthesis



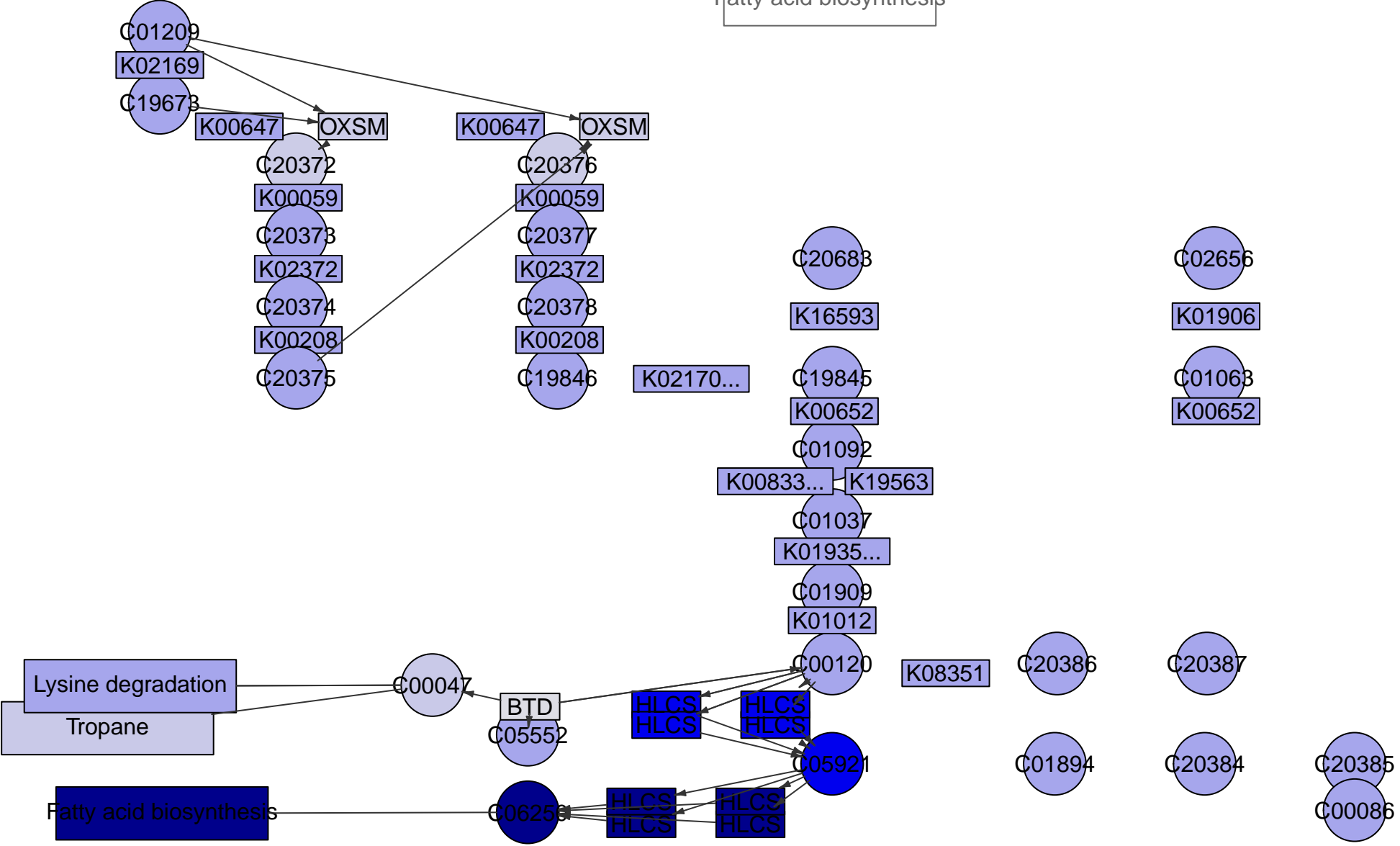
Biotin metabolism  
MPI-224

Fatty acid biosynthesis



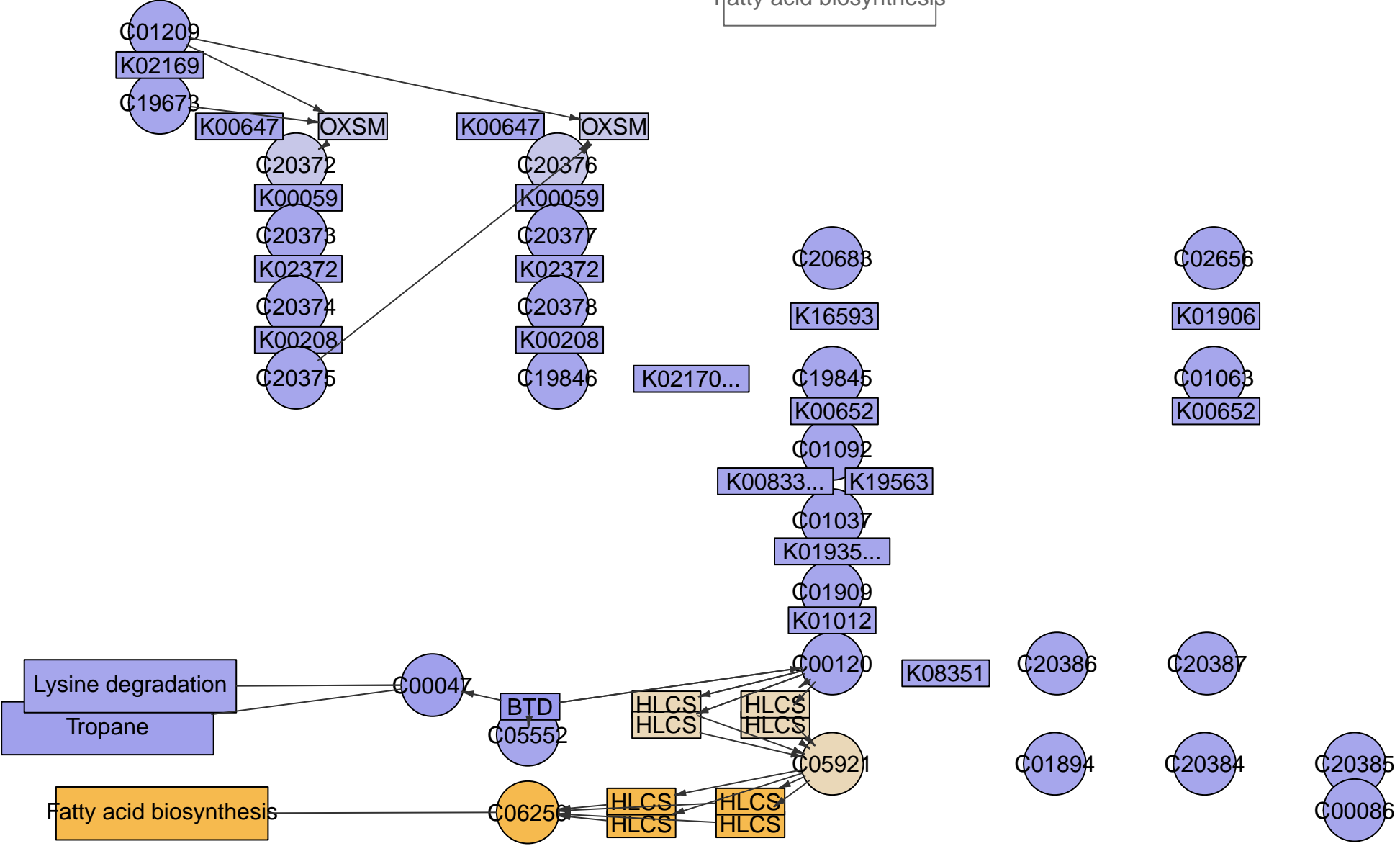
Biotin metabolism  
MPI-226

Fatty acid biosynthesis



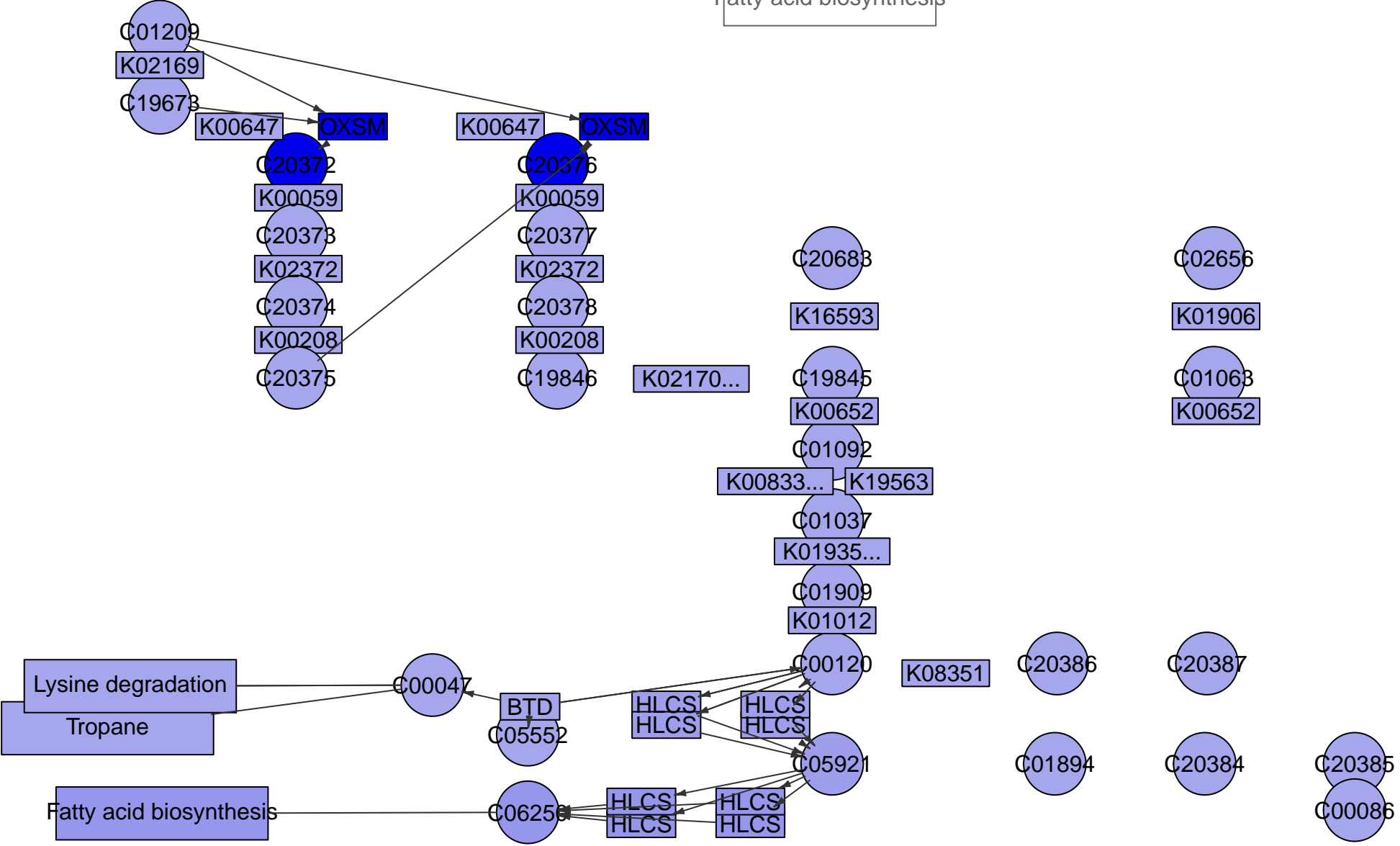
Biotin metabolism  
MPI-227

Fatty acid biosynthesis



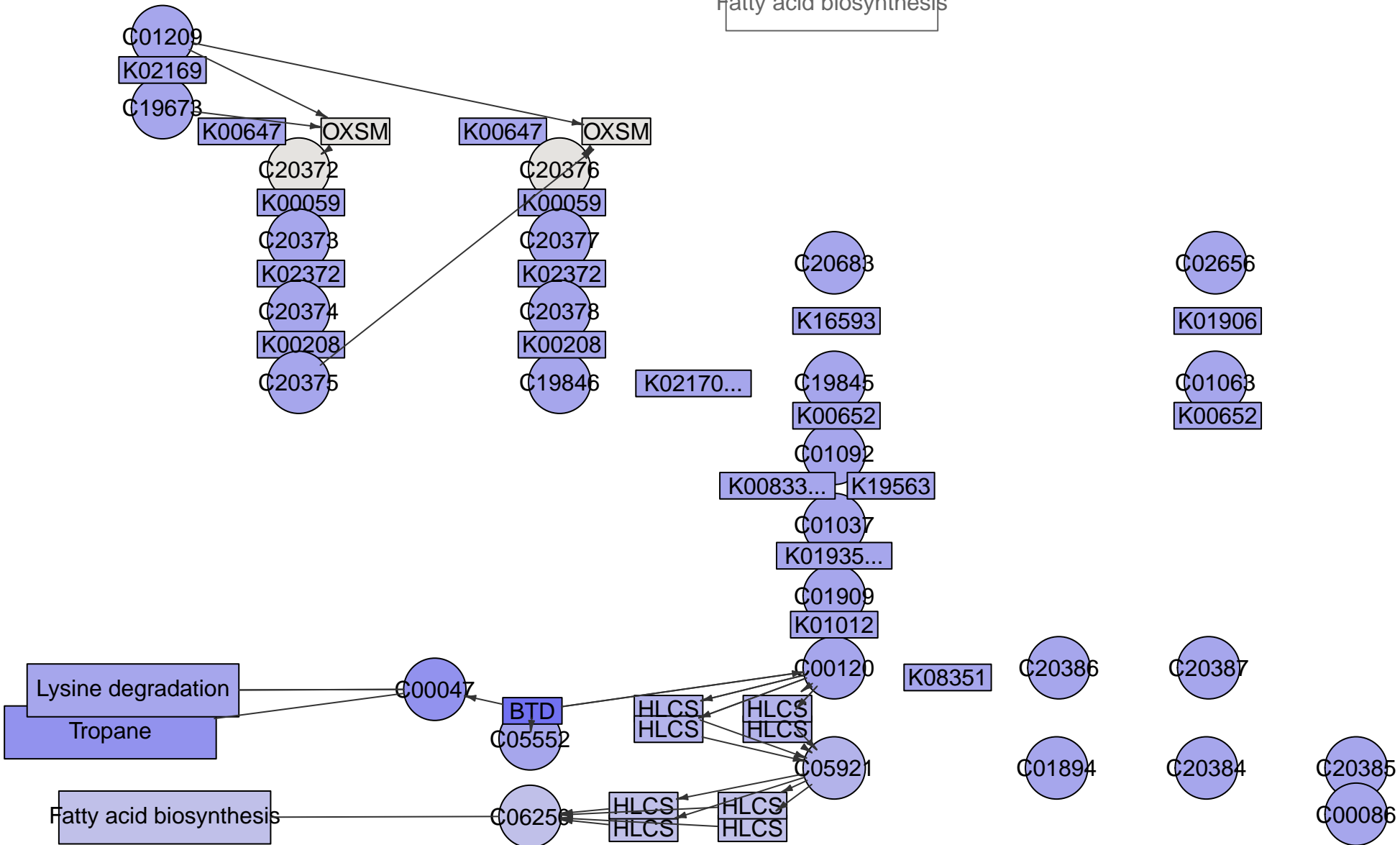
Biotin metabolism  
MPI-228

Fatty acid biosynthesis



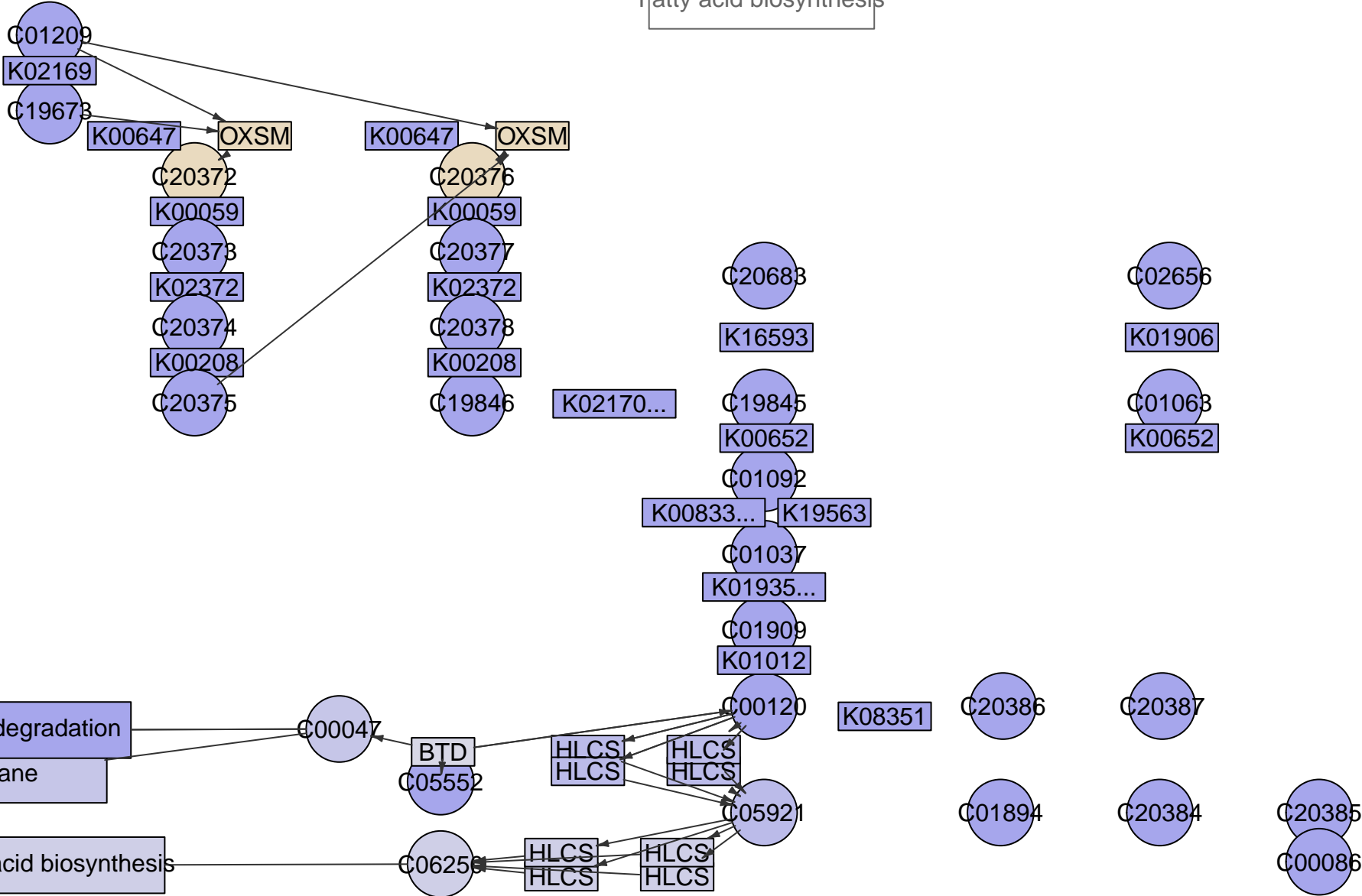
Biotin metabolism  
MPI-229

Fatty acid biosynthesis



Biotin metabolism  
MPI-230

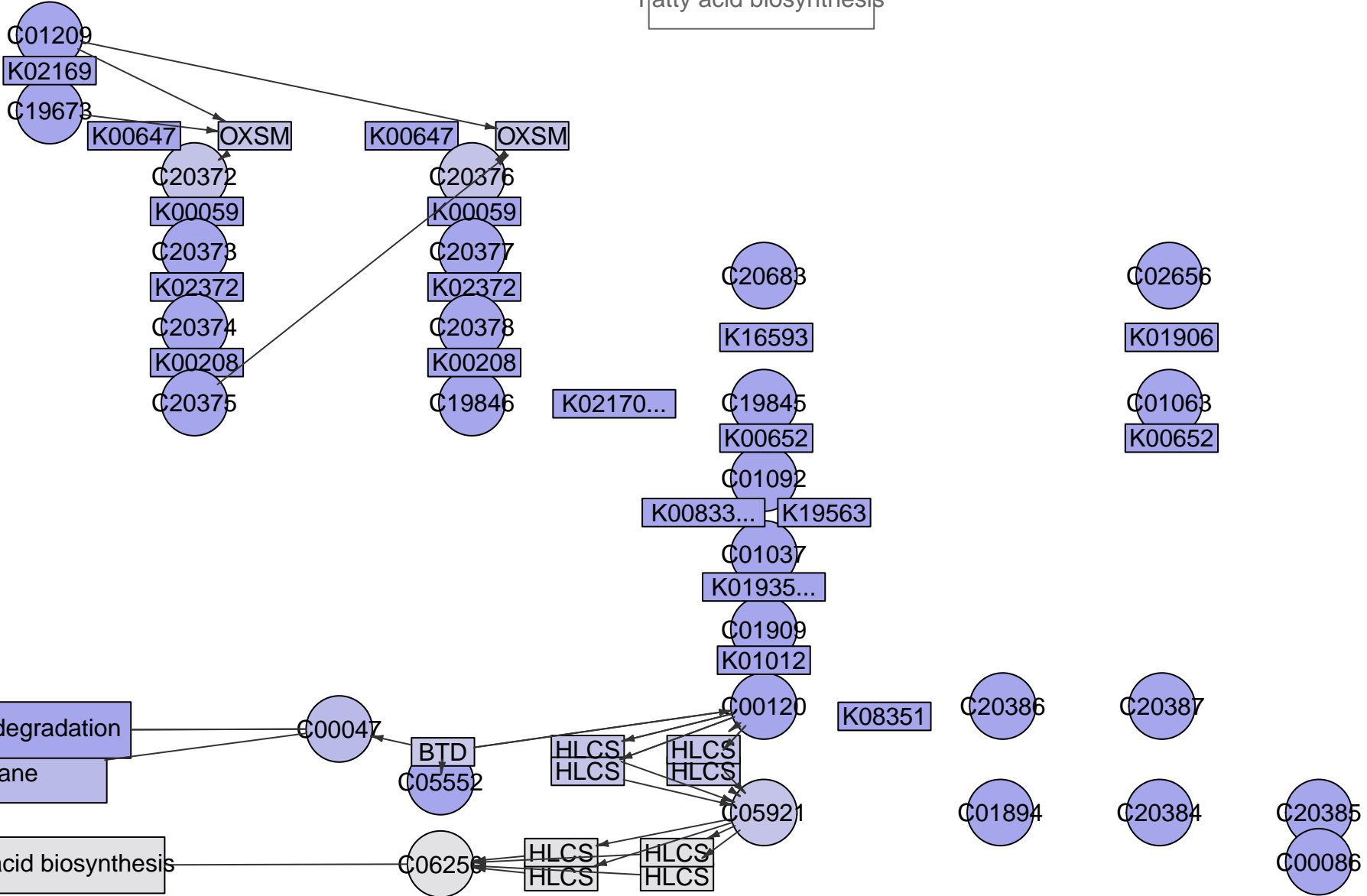
Fatty acid biosynthesis





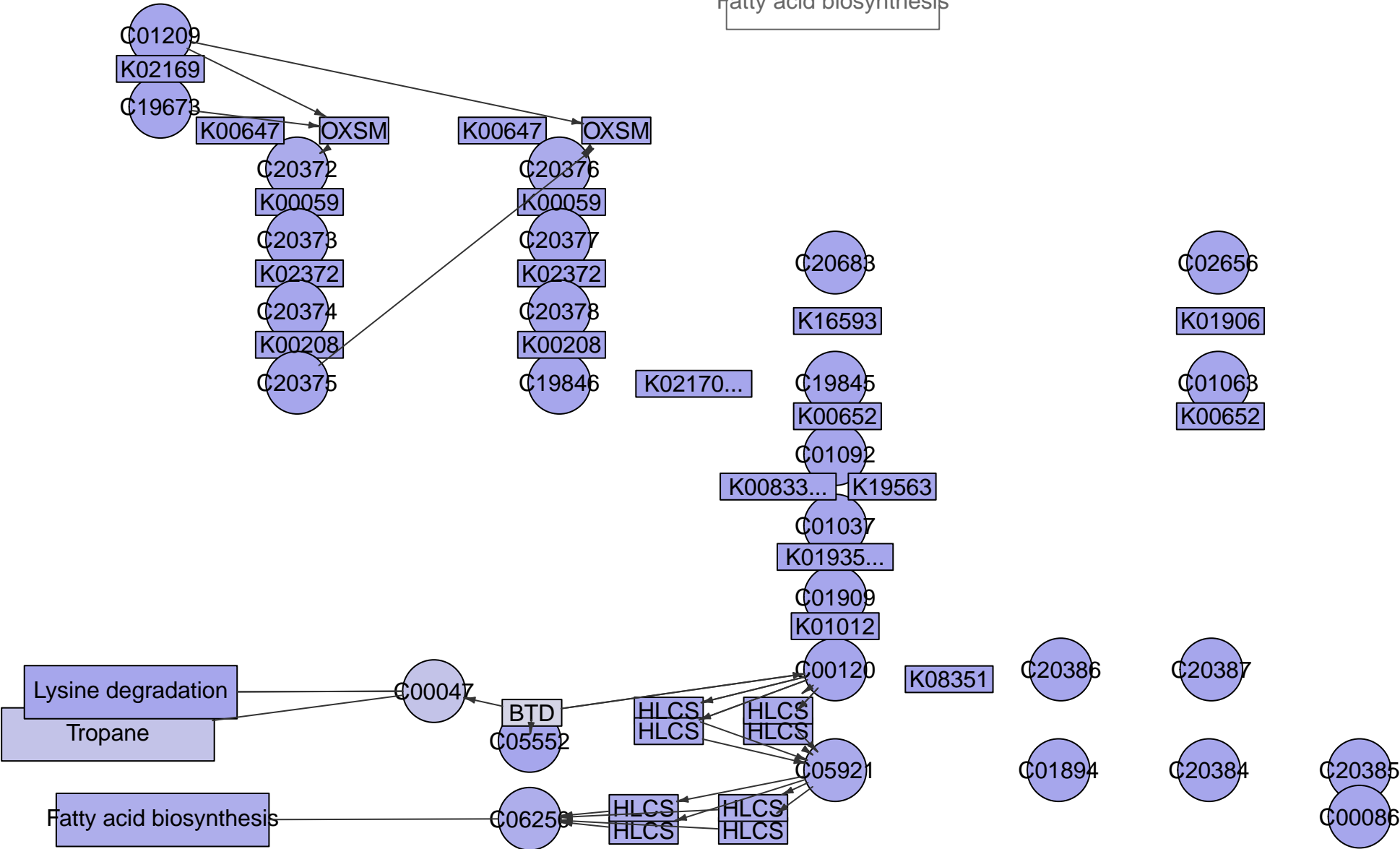
Biotin metabolism  
MPI-231

Fatty acid biosynthesis



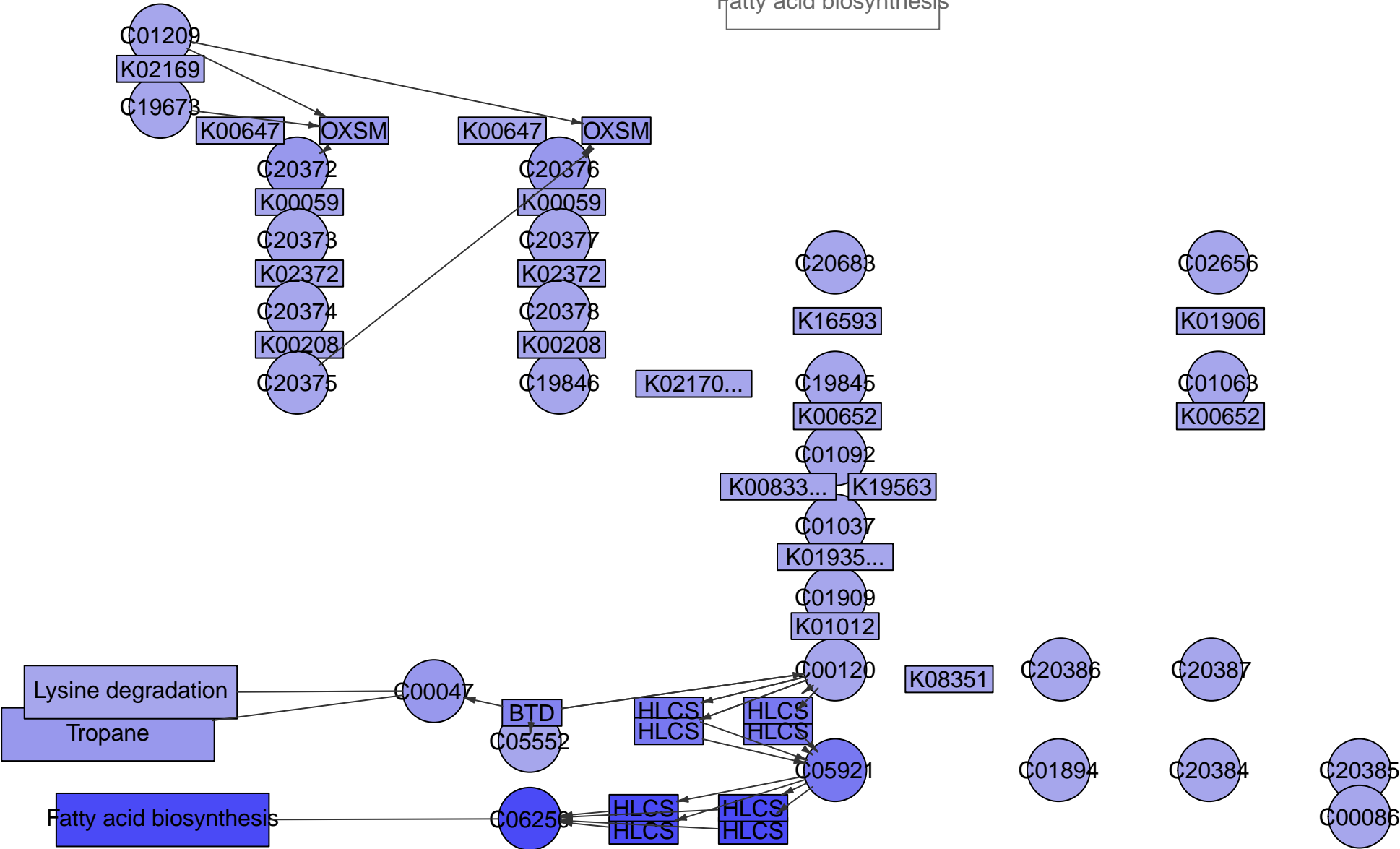
Biotin metabolism  
MPI-232

Fatty acid biosynthesis



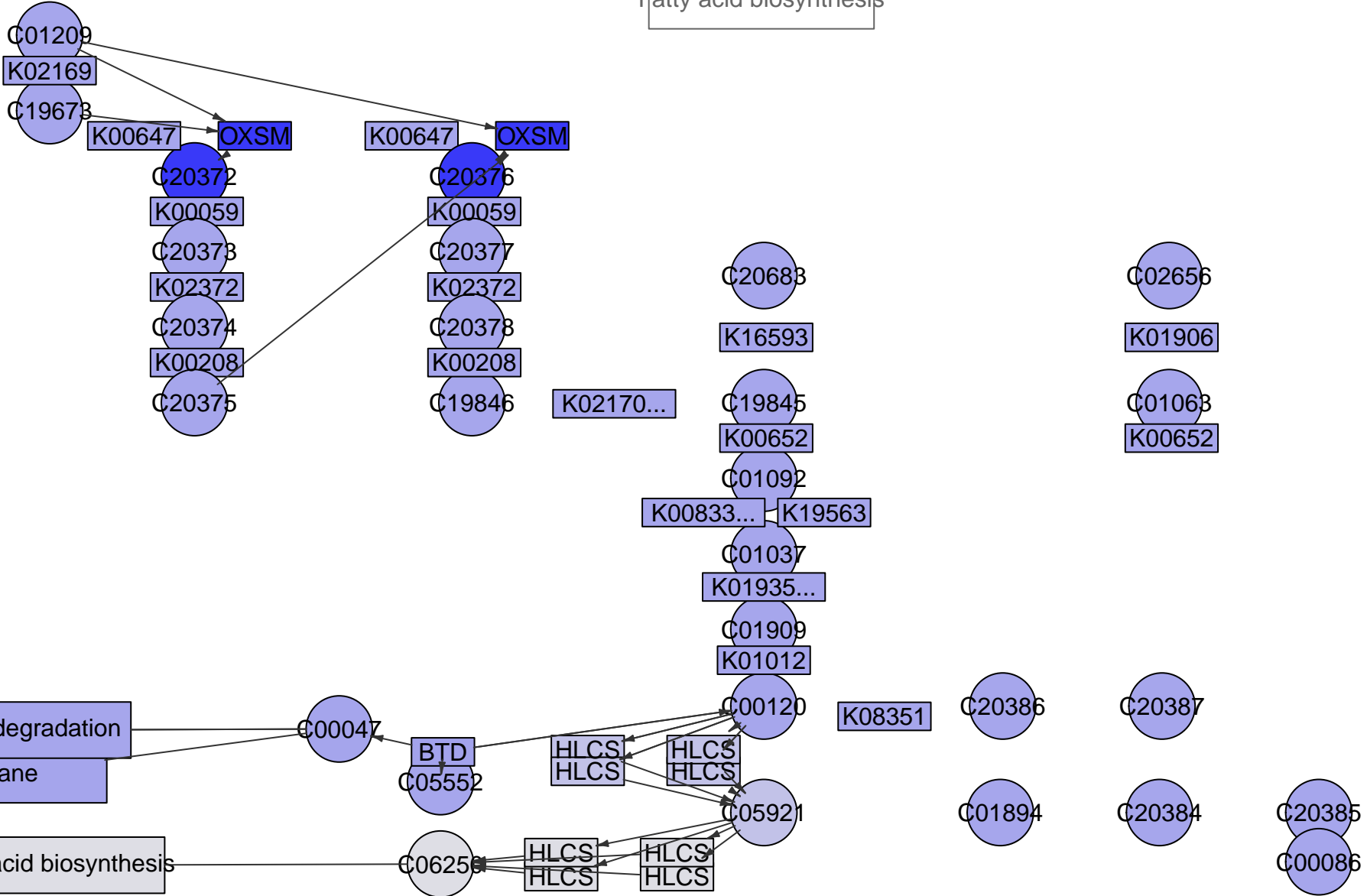
Biotin metabolism  
MPI-233

Fatty acid biosynthesis



Biotin metabolism  
MPI-234

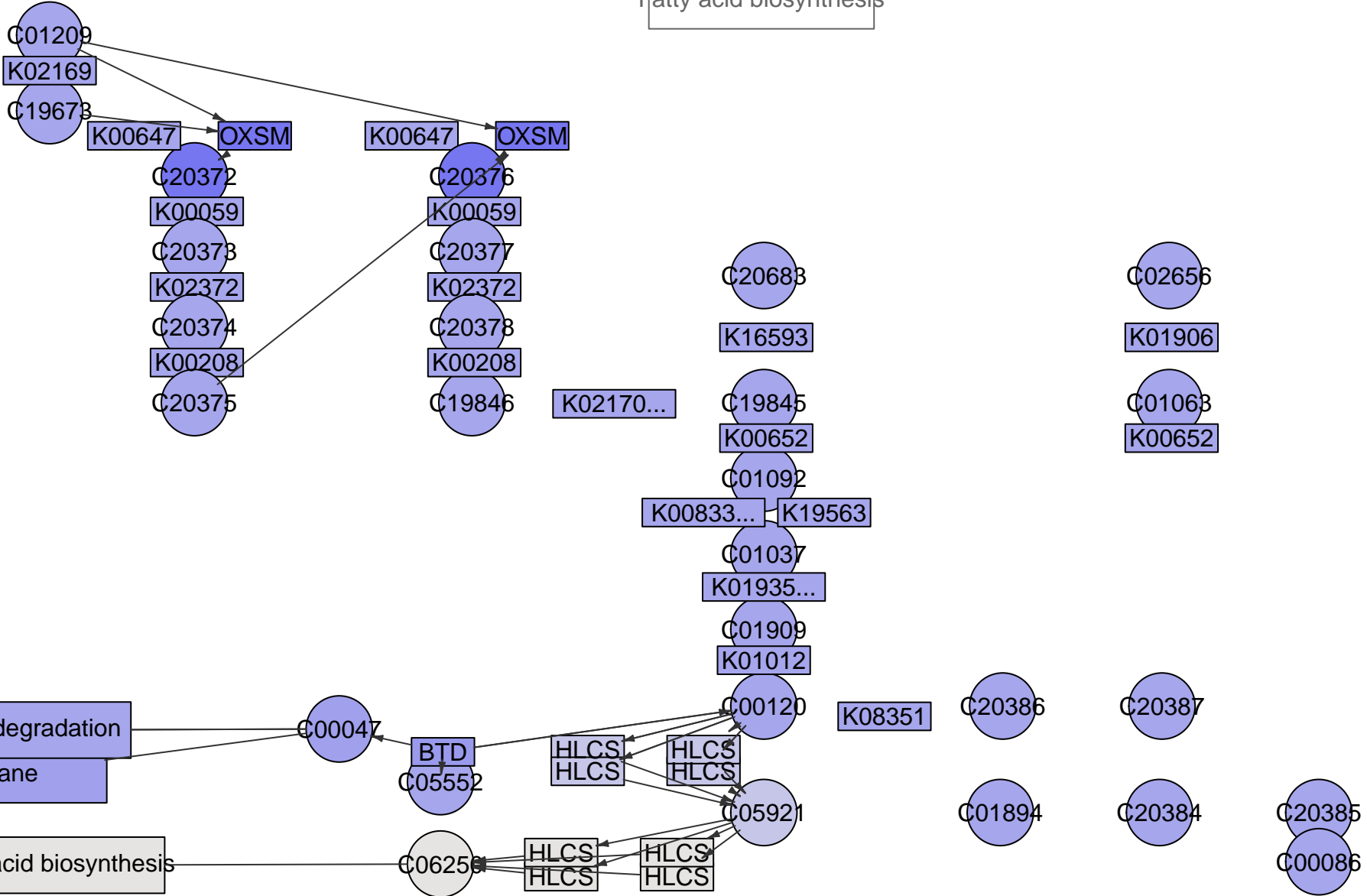
Fatty acid biosynthesis





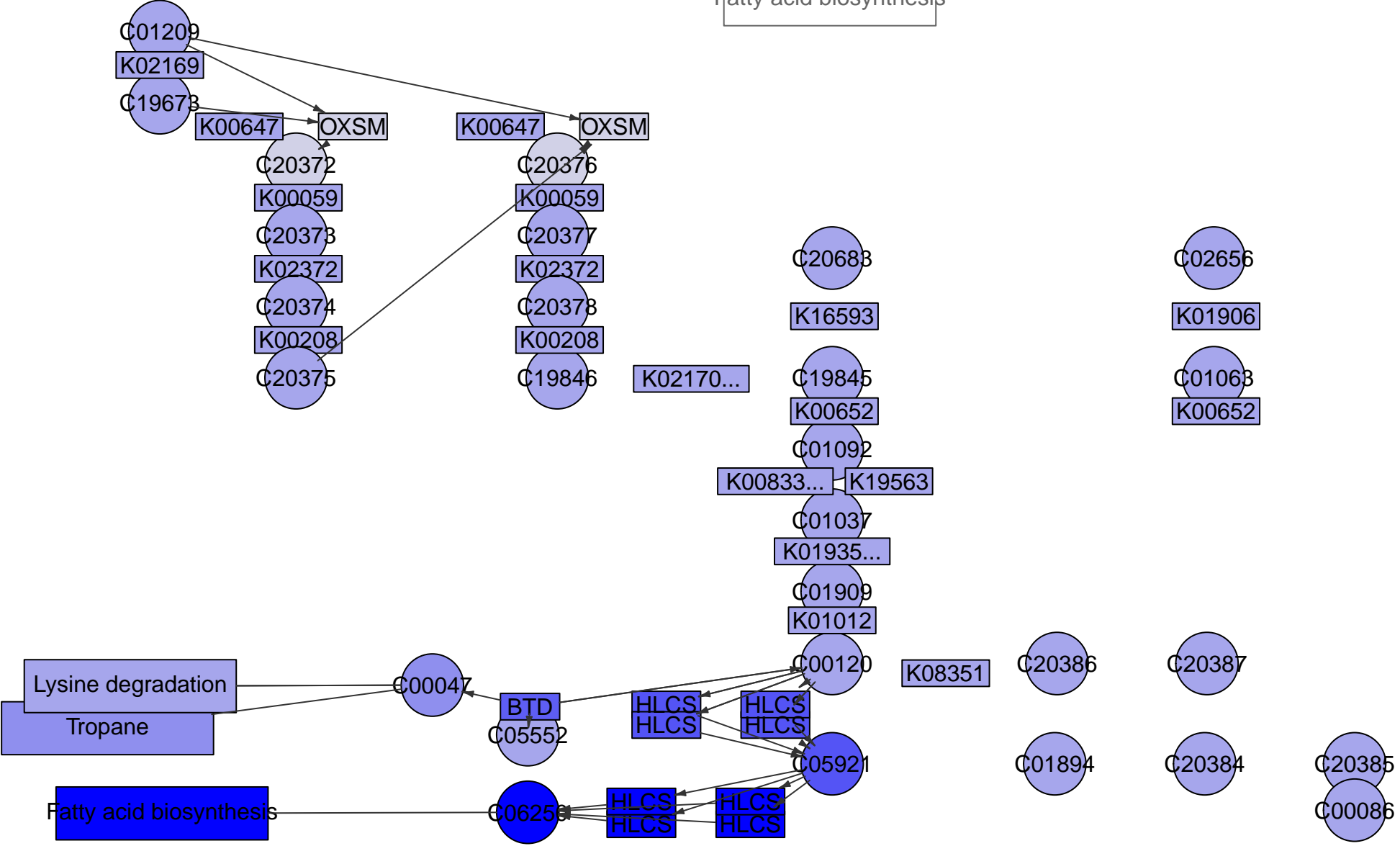
Biotin metabolism  
MPI-236

Fatty acid biosynthesis



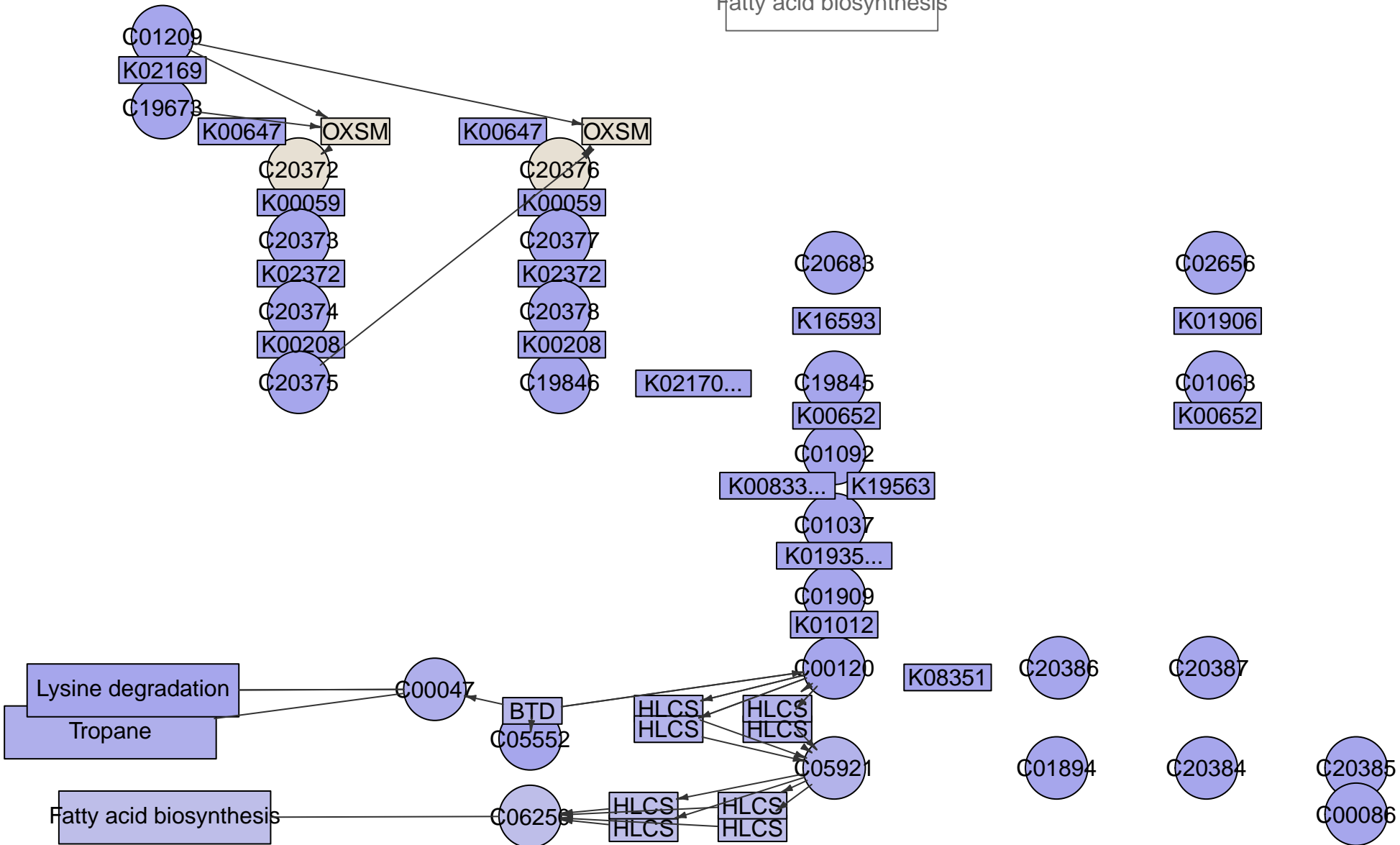
Biotin metabolism  
MPI-237

Fatty acid biosynthesis



Biotin metabolism  
MPI-239

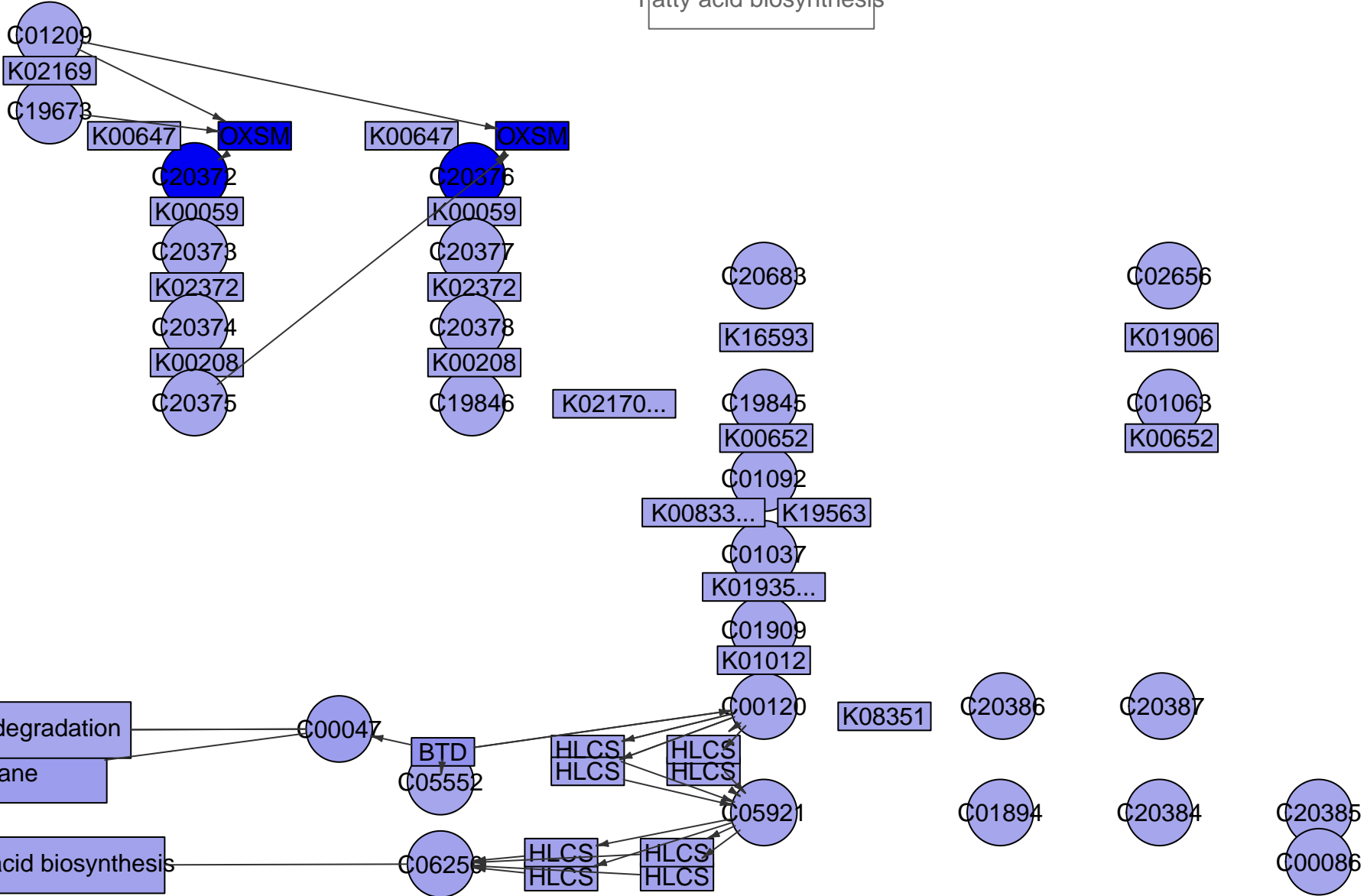
Fatty acid biosynthesis





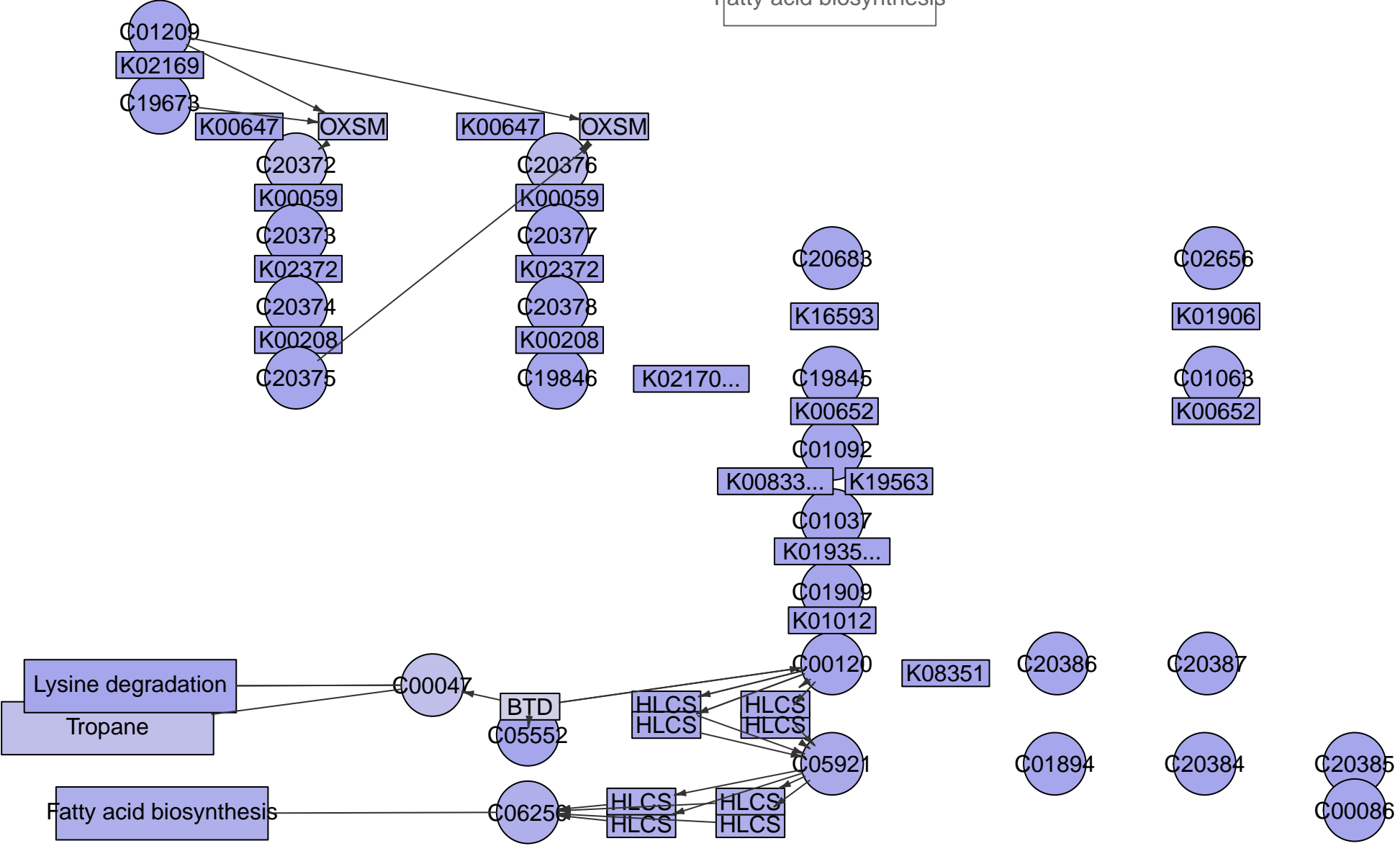
Biotin metabolism  
MPI-241

Fatty acid biosynthesis



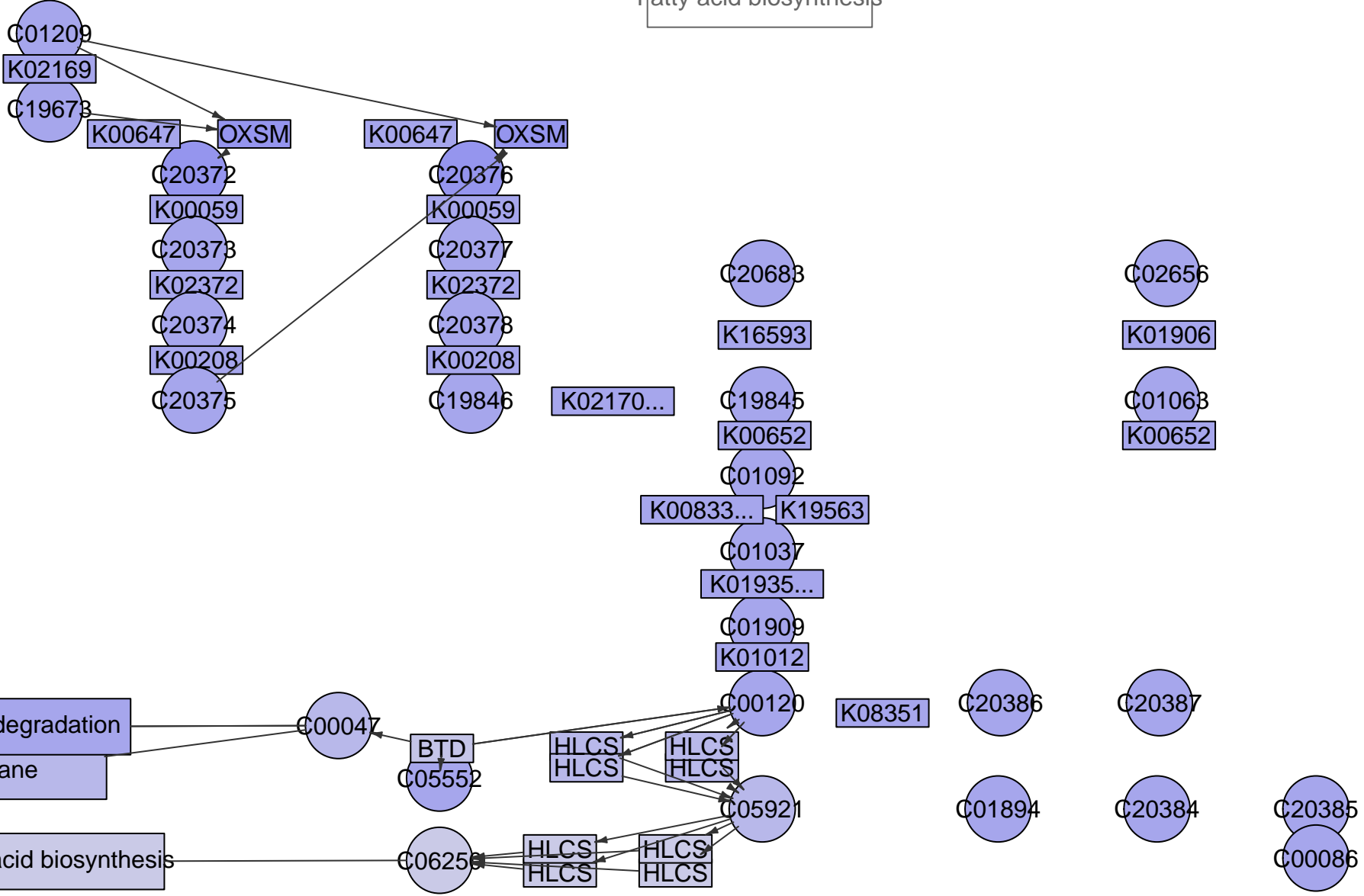
Biotin metabolism  
MPI-243

Fatty acid biosynthesis



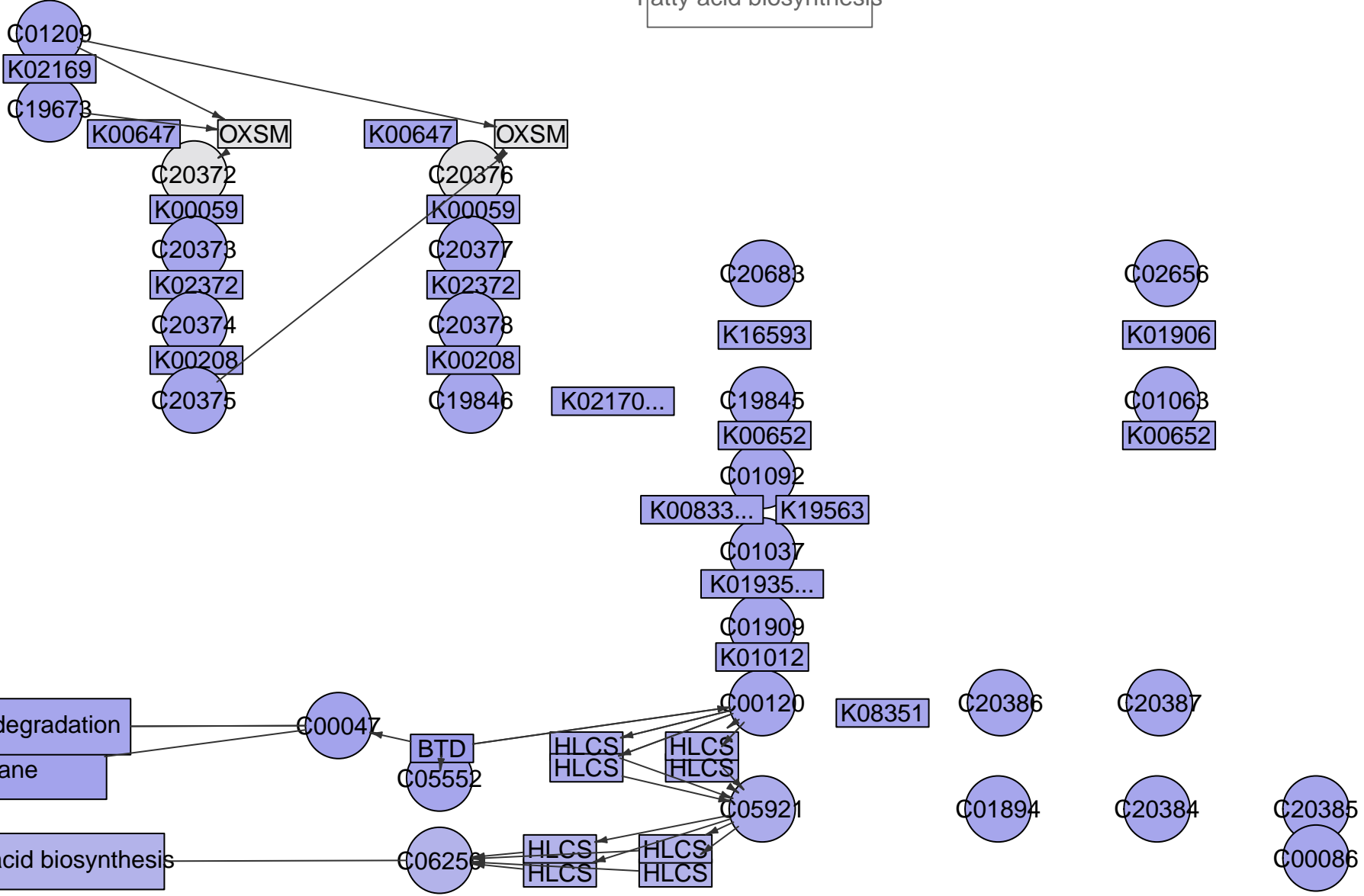
Biotin metabolism  
MPI-244

Fatty acid biosynthesis



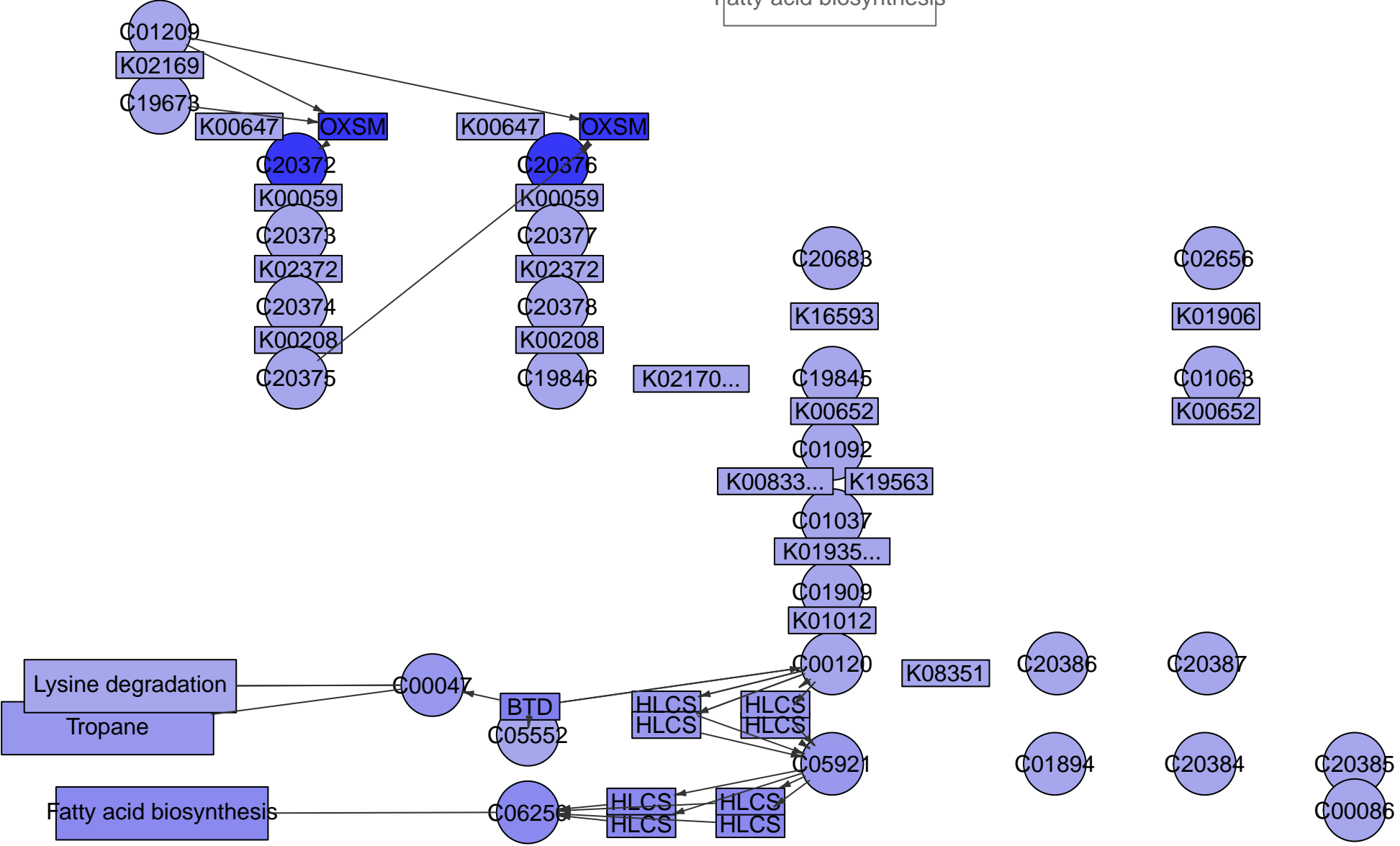
Biotin metabolism  
MPI-246

Fatty acid biosynthesis



Biotin metabolism  
MPI-247

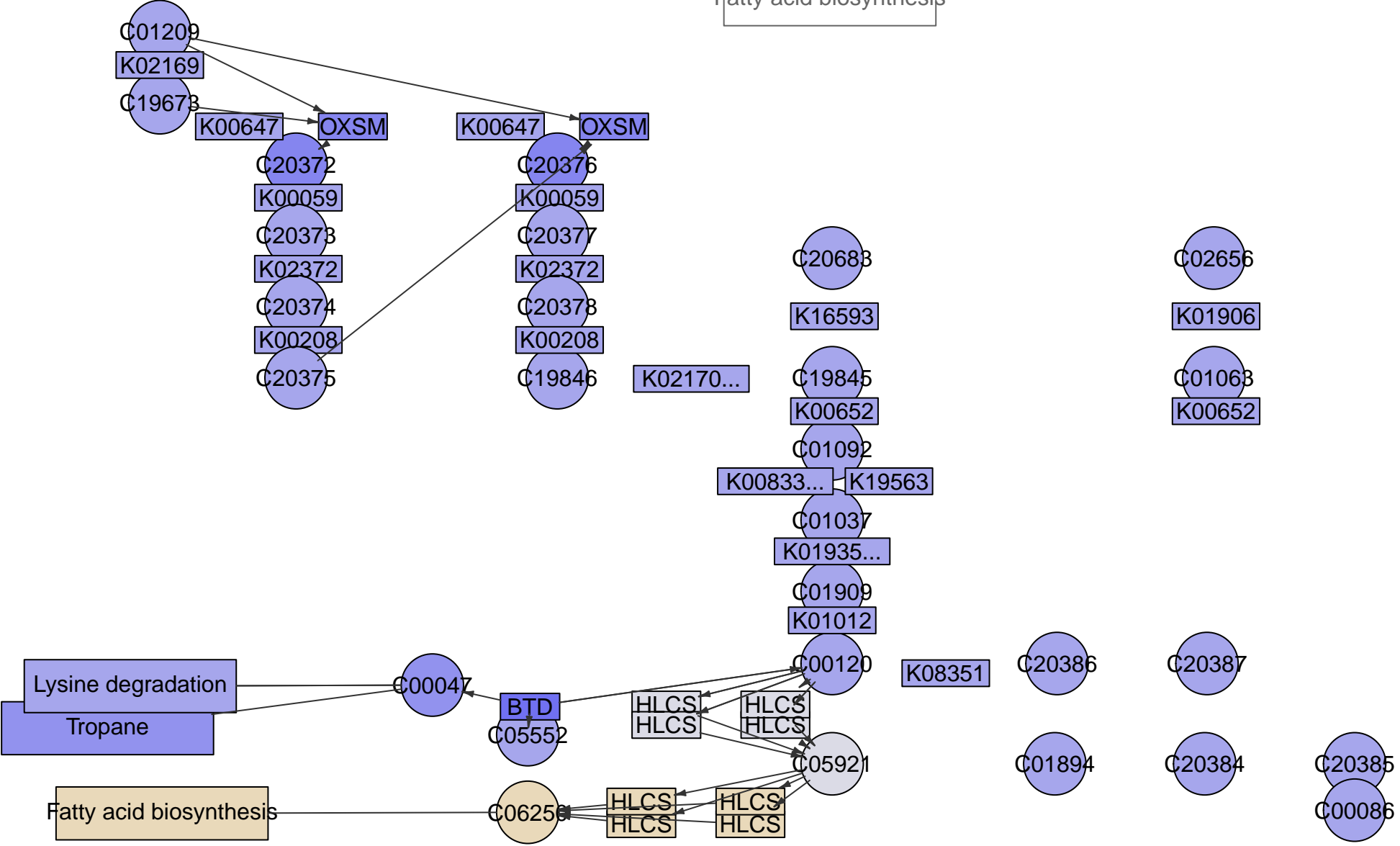
Fatty acid biosynthesis





Biotin metabolism  
MPI-255

Fatty acid biosynthesis



Biotin metabolism  
MPI-223b

Fatty acid biosynthesis

