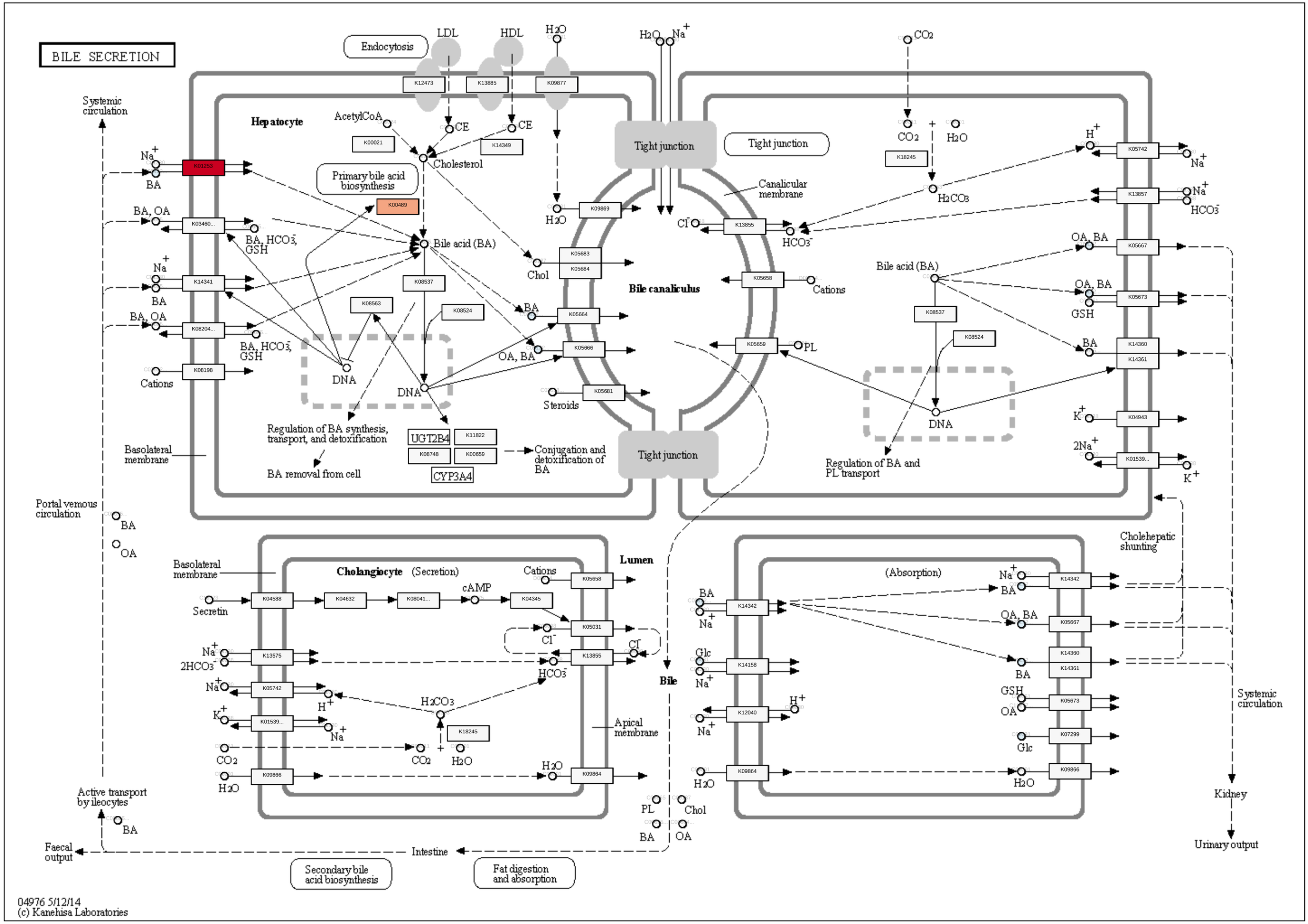
BILE SECRETION
Endocytosis
LDL
HDL
H2O
H2O
Na+
CO2
K12473
K13885
K09877
Systemic circulation
Hepatocyte
AcetylCoA
CE
CE
K00021
K14349
Cholesterol
Primary bile acid biosynthesis
K00489
Tight junction
Tight junction
CO2
+
H2O
K18245
H2CO3
Canalicular membrane
Na+
K01253
BA
BA, OA
K03460...
BA, HCO3-, GSH
Bile acid (BA)
K09869
H2O
Cl-
K13855
HCO3-
H+
K05742
Na+
K13857
Na+
HCO3-
OA, BA
K05667
Na+
K14341
BA
K08537
K05683
K05684
Chol
Bile canaliculus
K05658
Cations
Bile acid (BA)
OA, BA
K05673
GSH
BA, OA
K08204...
BA, HCO3-, GSH
K08563
K08524
BA
K05664
K08537
K08524
K05659
PL
BA
K14360
K14361
Cations
K08198
DNA
DNA
OA, BA
K05666
Steroids
K05681
DNA
K+
K04943
2Na+
K01539...
K+
Regulation of BA synthesis, transport, and detoxification
UGT2B4
K11822
K08748
K00659
CYP3A4
Conjugation and detoxification of BA
Tight junction
Regulation of BA and PL transport
Basolateral membrane
BA removal from cell
Portal vemous circulation
BA
OA
Cholehepatic shunting
Lumen
Basolateral membrane
Cholangiocyte (Secretion)
Cations
K05658
(Absorption)
Na+
BA
K14342
Secretin
K04588
K04632
K08041...
cAMP
K04345
BA
Na+
K14342
K05031
Cl-
OA, BA
K05667
Na+
2HCO3-
K13575
K13855
Cl-
Glc
K14158
Na+
K14360
K14361
BA
Bile
HCO3-
Na+
K05742
H+
H2CO3
H+
GSH
OA
K05673
K+
K01539...
Na+
K18245
Apical membrane
K12040
Na+
Glc
K07299
Systemic circulation
CO2
CO2
+
H2O
H2O
K09866
H2O
K09864
H2O
K09866
H2O
Active transport by ileocytes
BA
PL
Chol
BA
OA
Kidney
Faecal output
Intestine
Urinary output
Secondary bile acid biosynthesis
Fat digestion and absorption
04976 5/12/14
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