

Map ID	Map Name	Seqs	#Seqs	URL
ko04141	Protein processing in endoplasmic reticulum	H9IZ19 Q3V6C6 Q8I6Y8 H9IT95 I4DMH6 I4DIQ3 I4DNK8 H9JSN0 I4DNH5 H9JX14 I4DMW4 S4PTH3 S4NNL1 H9JK13 H9J5V8 G6DBR6 H9J5Q7 G6DQ02 S4PKX7 G6CPN3 S4P5W3 H9U396	22	http://www.kegg.jp/kegg-bin/show_pathway?ko04141+K07953+K04079+K03237+K08057+K08057+K09580+K04555+K09502+K09584+K09556+K10839+K14009+K11718+K14009+K07151+K14003+K14004+K12668+K08056+K08056+K14018+K09487
ko01200	Carbon metabolism	B3TEH3 I4DP84 G0T406 L7R6U6 C9S271 D6BNT9 H9J814 G6CIZ7 G6CTA2 S4PW23 H9J2S8 H9JHI6 S4NSU9 H9JFB9 F8UEY1 H9IUJ6 H9JBL2 G6CY74 G6CTV3 G6CWA4 S4P8U1	21	http://www.kegg.jp/kegg-bin/show_pathway?ko01200+K01689+K01647+K00121+K01689+K07511+K01810+K07511+K01803+K00600+K00600+K00658+K00627+K01900+K01679+K00134+K00616+K00031+K00029+K00030+K07515+K00658

ko03010	Ribosome	Q8WQJ2 Q6F467 D1LYK5 Q5UAT9 E3UPC7 E3UUW3 S4NRF9 E7DZ32 Q95UN1 G6DME4 D1LYQ1 G6DAB3 D3X5P2 Q8ISR4 Q1HQC0 G6DH38 I4DMG3 I4DID4 Q8I864 G0ZEI0	20	http://www.kegg.jp/kegg-bin/show_pathway?ko03010+K02941+K02962+K02870+K02943+K02908+K02922+K02958+K02929+K02990+K02942+K02905+K02865+K02989+K02866+K02970+K02967+K02934+K02934+K02997+K02903
ko03013	RNA transport	G6DKM8 B7SET3 Q8I6Y8 H9CV61 Q1HPW4 A7UFP8 G6CMA9 I1E4Y7 G6D354 S4PB07 S4PL34 O44308 D1LAB2 S4NTC3 H9J5Q7 G6CSN6 S4PTG2 D3X5F2 Q2LAR4	19	http://www.kegg.jp/kegg-bin/show_pathway?ko03013+K12877+K03231+K03237+K03231+K03246+K03231+K13126+K03248+K12879+K14304+K14284+K03231+K03231+K03243+K14004+K05749+K03258+K03231+K03231
ko05016	Huntington's disease	Q86CZ0 I4DJ87 H9JV88 M9UVR1 G6DAS4 G6CKB9 I4DNY2 H9J1U7 H9ISH7 H9JBG4 M9TOT9 E9LFS8 I4DNC1 G6DL52 H9JA67 H9IUC3 H9IXM2	17	http://www.kegg.jp/kegg-bin/show_pathway?ko05016+K05863+K02134+K03948+K15040+K02135+K03957+K11826+K03006+K11644+K11351+K02126+K02256+K00413+K03008+K02128+K04498+K05863

ko05012	Parkinson's disease	Q86CZ0 I4DJ87 H9JV88 M9UVR1 G6DAS4 G6CKB9 I4DNK8 H9JBG4 M9TOT9 E9LFS8 I4DNC1 H9JA67 H9IXM2	13	http://www.kegg.jp/kegg-bin/show_pathway?ko05012+K05863+K02134+K03948+K15040+K02135+K03957+K04555+K11351+K02126+K02256+K00413+K02128+K05863
ko05010	Alzheimer's disease	E3UJZ8 I4DJ87 H9JV88 G6DAS4 G6CKB9 S4NZV0 H9JBG4 M9TOT9 E9LFS8 I4DNC1 F8UEY1 H9JA67	12	http://www.kegg.jp/kegg-bin/show_pathway?ko05010+K02183+K02134+K03948+K02135+K03957+K01408+K11351+K02126+K02256+K00413+K00134+K02128
ko00190	Oxidative phosphorylation	G6CKL7 I4DJ87 H9JV88 G6DAS4 G6CKB9 H9JBG4 M9TOT9 E9LFS8 I4DNC1 E2IV54 G6CQI5 H9JA67	12	http://www.kegg.jp/kegg-bin/show_pathway?ko00190+K02150+K02134+K03948+K02135+K03957+K11351+K02126+K02256+K00413+K02145+K02152+K02128
ko00010	Glycolysis / Gluconeogenesis	B3TEH3 G0T406 L7R6U6 D6BNT9 D2SNQ8 G6CIZ7 D2SNS6 H9JHI6 G6CJU9 G6DFF9 F8UEY1	11	http://www.kegg.jp/kegg-bin/show_pathway?ko00010+K01689+K00121+K01689+K01810+K00128+K01803+K00128+K00627+K00128+K15779+K00134
ko01230	Biosynthesis of amino acids	B3TEH3 I4DP84 L7R6U6 G6CIZ7 G6CTA2 S4PW23 Q1HQB5 F8UEY1 H9IUJ6 H9JBL2 G6CTV3	11	http://www.kegg.jp/kegg-bin/show_pathway?ko01230+K01689+K01647+K01689+K01803+K00600+K00600+K00789+K00134+K00616+K00031+K00030

ko03040	Spliceosome	G6DKM8 A9XZA5 H9JA60 H9JD02 G6D689 H9JR08 G6D354 Q1HPT3 S4NSX0 H9JB76	10	http://www.kegg.jp/kegg-bin/show_pathway?ko03040+K12877+K12820+K12741+K12857+K11092+K12823+K12879+K12741+K12872+K09567
ko05134	Legionellosis	H9IZ19 B7SET3 H9CV61 A7UFP8 I4DIL8 O44308 D1LAB2 D3X5F2 Q2LAR4	9	http://www.kegg.jp/kegg-bin/show_pathway?ko05134+K07953+K03231+K03231+K03231+K03233+K03231+K03231+K03231+K03231
ko05166	HTLV-I infection	Q86CZ0 Q8MYA5 H9IT95 I4DMH6 M9UVR1 S4PEX9 H9IUC3 H9IXM2	8	http://www.kegg.jp/kegg-bin/show_pathway?ko05166+K05863+K04802+K08057+K08057+K15040+K02327+K04498+K05863
ko00020	Citrate cycle (TCA cycle)	I4DP84 H9J2S8 H9JHI6 S4NSU9 H9JFB9 H9JBL2 G6CTV3 S4P8U1	8	http://www.kegg.jp/kegg-bin/show_pathway?ko00020+K01647+K00658+K00627+K01900+K01679+K00031+K00030+K00658
ko05169	Epstein-Barr virus infection	H9JCM2 G6DIQ9 D9N4J4 H9J1U7 H9JX71 G6DL52 G6D5P3 H9IUC3	8	http://www.kegg.jp/kegg-bin/show_pathway?ko05169+K03035+K15979+K15979+K03006+K03036+K03008+K06630+K04498
ko00071	Fatty acid degradation	G0T406 C9S271 H9J814 D2SNQ8 D2SNS6 G6CJU9 G6CYN2 G6CWA4	8	http://www.kegg.jp/kegg-bin/show_pathway?ko00071+K00121+K07511+K07511+K00128+K00128+K00128+K15013+K07515
ko00310	Lysine degradation	C9S271 H9J814 D2SNQ8 D2SNS6 H9J2S8 G6CJU9 G6CWA4 S4P8U1	8	http://www.kegg.jp/kegg-bin/show_pathway?ko00310+K07511+K07511+K00128+K00128+K00658+K00128+K07515+K00658

ko05203	Viral carcinogenesis	G6DIQ9 D9N4J4 H9JJE6 Q1HPQ3 G6D396 G6D5P3 G6DIF6 H9IUC3	8	http://www.kegg.jp/kegg-bin/show_pathway?ko05203+K15979+K15979+K11254+K03123+K05768+K06630+K11254+K04498
ko05168	Herpes simplex infection	Q8I6Y8 H9J1U7 R4ITA8 O77129 S4PL34 S4PG29 H9IUC3	7	http://www.kegg.jp/kegg-bin/show_pathway?ko05168+K03237+K03006+K14840+K02633+K14284+K14840+K04498
ko00040	Pentose and glucuronate interconversions	E1U7I5 D2SNQ8 U5KC00 D2SNS6 G6CJU9 G6D8L4 G9LPR1	7	http://www.kegg.jp/kegg-bin/show_pathway?ko00040+K00963+K00128+K00011+K00128+K00128+K00008+K00699
ko00230	Purine metabolism	S4PCX5 H9J1U7 H9IT11 S4PEX9 G6DFP9 S4PD63 G6DL52	7	http://www.kegg.jp/kegg-bin/show_pathway?ko00230+K10808+K03006+K01952+K02327+K15779+K01518+K03008
ko00970	Aminoacyl-tRNA biosynthesis	G6DNL4 E9KGW9 EOD4V7 H9IX66 G6CVH5 G6DFX7 G6CNG9	7	http://www.kegg.jp/kegg-bin/show_pathway?ko00970+K01875+K14163+K01890+K01868+K01876+K01870+K01883
ko00280	Valine, leucine and isoleucine degradation	C9S271 H9J814 D2SNQ8 D2SNS6 G6CJU9 G6CRM2 G6CWA4	7	http://www.kegg.jp/kegg-bin/show_pathway?ko00280+K07511+K07511+K00128+K00128+K00128+K05607+K07515
ko04144	Endocytosis	I4DNY2 S4P5Y2 S4P8C3 S4P621 Q1HQ07 G6DG28 G6CIU6	7	http://www.kegg.jp/kegg-bin/show_pathway?ko04144+K11826+K12471+K04707+K12200+K12199+K12486+K18442
ko04022	cGMP-PKG signaling pathway	E3UJZ8 Q86CZ0 M9UVR1 Q8T9W9 H9J971 H9IXM2	6	http://www.kegg.jp/kegg-bin/show_pathway?ko04022+K02183+K05863+K15040+K07376+K01540+K05863

ko05034	Alcoholism	E3UJZ8 Q1HPV7 H9IZJ3 H9JJE6 H9JY79 G6DIF6	6	http://www.kegg.jp/kegg-bin/show_pathway?ko05034+K02183+K11251+K06279+K11254+K11251+K11254
ko05200	Pathways in cancer	Q3V6C6 S4P8C3 H9IY28 H9JFB9 H9U396 H9IUC3	6	http://www.kegg.jp/kegg-bin/show_pathway?ko05200+K04079+K04707+K03870+K01679+K09487+K04498
ko04932	Non-alcoholic fatty liver disease (NAFLD)	Q8I6Y8 H9JV88 G6CKB9 H9JBG4 E9LFS8 I4DNC1	6	http://www.kegg.jp/kegg-bin/show_pathway?ko04932+K03237+K03948+K03957+K11351+K02256+K00413
ko00520	Amino sugar and nucleotide sugar metabolism	E1U7I5 D6BNT9 S4PN79 I4DNI3 H9JFY6 G6DFF9	6	http://www.kegg.jp/kegg-bin/show_pathway?ko00520+K00963+K01810+K01784+K00621+K01711+K15779
ko00240	Pyrimidine metabolism	S4PCX5 G6D3R7 H9J1U7 S4PEX9 S4PD63 G6DL52	6	http://www.kegg.jp/kegg-bin/show_pathway?ko00240+K10808+K13800+K03006+K02327+K01518+K03008
ko00380	Tryptophan metabolism	C9S271 H9J814 D2SNQ8 D2SNS6 G6CJU9 G6CWA4	6	http://www.kegg.jp/kegg-bin/show_pathway?ko00380+K07511+K07511+K00128+K00128+K00128+K07515
ko00410	beta-Alanine metabolism	C9S271 H9J814 D2SNQ8 D2SNS6 G6CJU9 G6CWA4	6	http://www.kegg.jp/kegg-bin/show_pathway?ko00410+K07511+K07511+K00128+K00128+K00128+K07515
ko00620	Pyruvate metabolism	D2SNQ8 D2SNS6 H9JHI6 G6CJU9 H9JFB9 G6CY74	6	http://www.kegg.jp/kegg-bin/show_pathway?ko00620+K00128+K00128+K00627+K00128+K01679+K00029
ko00330	Arginine and proline metabolism	E9NZS5 D2SNQ8 D2SNS6 G6CJU9 Q53EK0	5	http://www.kegg.jp/kegg-bin/show_pathway?ko00330+K00933+K00128+K00128+K00128+K00472
ko00680	Methane metabolism	B3TEH3 G0T406 L7R6U6 G6CTA2 S4PW23	5	http://www.kegg.jp/kegg-bin/show_pathway?ko00680+K01689+K00121+K01689+K00600+K00600

ko03018	RNA degradation	B3TEH3 G6CMA9 H9JMC0 L7R6U6 G6D1T2	5	http://www.kegg.jp/kegg-bin/show_pathway?ko03018+K01689+K13126+K12614+K01689+K04043
ko04066	HIF-1 signaling pathway	B3TEH3 L7R6U6 H9IY28 F8UEY1 H9IUC3	5	http://www.kegg.jp/kegg-bin/show_pathway?ko04066+K01689+K01689+K03870+K00134+K04498
ko04626	Plant-pathogen interaction	E3UJZ8 Q3V6C6 S4PEA4 H9ITJ2 H9U396	5	http://www.kegg.jp/kegg-bin/show_pathway?ko04626+K02183+K04079+K12795+K00864+K09487
ko04151	PI3K-Akt signaling pathway	Q3V6C6 G6CKL9 S4PTG2 G6D5P3 H9U396	5	http://www.kegg.jp/kegg-bin/show_pathway?ko04151+K04079+K09554+K03258+K06630+K09487
ko04612	Antigen processing and presentation	Q3V6C6 H9IT95 I4DMH6 S4PKX7 G6CPN3	5	http://www.kegg.jp/kegg-bin/show_pathway?ko04612+K04079+K08057+K08057+K08056+K08056
ko04145	Phagosome	G6CKL7 H9IT95 I4DMH6 E2IV54 G6CQI5	5	http://www.kegg.jp/kegg-bin/show_pathway?ko04145+K02150+K08057+K08057+K02145+K02152
ko04721	Synaptic vesicle cycle	G6CKL7 I4DNY2 H9JAP5 E2IV54 G6CQI5	5	http://www.kegg.jp/kegg-bin/show_pathway?ko04721+K02150+K11826+K04560+K02145+K02152
ko03050	Proteasome	H9J1E8 H9JCM2 B6VAH6 H9JX71 H9J567	5	http://www.kegg.jp/kegg-bin/show_pathway?ko03050+K02738+K03035+K02737+K03036+K02730
ko04120	Ubiquitin mediated proteolysis	H9JEB5 I4DNK8 S4P8C3 H9IY28 G6D3G4	5	http://www.kegg.jp/kegg-bin/show_pathway?ko04120+K10579+K04555+K04707+K03870+K10596
ko00561	Glycerolipid metabolism	D2SNQ8 U5KC00 D2SNS6 G6CJU9 H9ITJ2	5	http://www.kegg.jp/kegg-bin/show_pathway?ko00561+K00128+K00011+K00128+K00128+K00864
ko03008	Ribosome biogenesis in eukaryotes	G6DLM7 S4PL34 G6DB46 S4NXV8 G6CRF5	5	http://www.kegg.jp/kegg-bin/show_pathway?ko03008+K11131+K14284+K14572+K14538+K14556
ko04810	Regulation of actin cytoskeleton	K9J9U2 G6CSN6 G6D396 H9J2G3	4	http://www.kegg.jp/kegg-bin/show_pathway?ko04810+K05765+K05749+K05768+K05767

ko03015	mRNA surveillance pathway	G6DKM8 G6CMA9 S4PL34 H9JFV2	4	http://www.kegg.jp/kegg-bin/show_pathway?ko03015+K12877+K13126+K14284+K06100
ko04020	Calcium signaling pathway	E3UJZ8 Q86CZ0 M9UVR1 H9IXM2	4	http://www.kegg.jp/kegg-bin/show_pathway?ko04020+K02183+K05863+K15040+K05863
ko04915	Estrogen signaling pathway	E3UJZ8 Q3V6C6 H9IZJ3 H9U396	4	http://www.kegg.jp/kegg-bin/show_pathway?ko04915+K02183+K04079+K06279+K09487
ko03030	DNA replication	Q8MYA5 S4PEX9 S4PXM6 H9JPK6	4	http://www.kegg.jp/kegg-bin/show_pathway?ko03030+K04802+K02327+K02542+K10756
ko03420	Nucleotide excision repair	Q8MYA5 I4DMW4 S4PEX9 H9JPK6	4	http://www.kegg.jp/kegg-bin/show_pathway?ko03420+K04802+K10839+K02327+K10756
ko04110	Cell cycle	Q8MYA5 S4PXM6 G6D5P3 H9IUC3	4	http://www.kegg.jp/kegg-bin/show_pathway?ko04110+K04802+K02542+K06630+K04498
ko05322	Systemic lupus erythematosus	Q1HPV7 H9JJE6 H9JY79 G6DIF6	4	http://www.kegg.jp/kegg-bin/show_pathway?ko05322+K11251+K11254+K11251+K11254
ko00052	Galactose metabolism	E1U7I5 U5KC00 S4PN79 G6DF9	4	http://www.kegg.jp/kegg-bin/show_pathway?ko00052+K00963+K00011+K01784+K15779
ko00500	Starch and sucrose metabolism	E1U7I5 D6BNT9 G6DF9 G9LPR1	4	http://www.kegg.jp/kegg-bin/show_pathway?ko00500+K00963+K01810+K15779+K00699
ko05110	Vibrio cholerae infection	G6CKL7 G6CTH9 E2IV54 G6CQI5	4	http://www.kegg.jp/kegg-bin/show_pathway?ko05110+K02150+K10949+K02145+K02152
ko00625	Chloroalkane and chloroalkene degradation	G0T406 D2SNQ8 D2SNS6 G6CJU9	4	http://www.kegg.jp/kegg-bin/show_pathway?ko00625+K00121+K00128+K00128+K00128
ko00640	Propanoate metabolism	C9S271 H9J814 S4NSU9 G6CWA4	4	http://www.kegg.jp/kegg-bin/show_pathway?ko00640+K07511+K07511+K01900+K07515
ko01212	Fatty acid metabolism	C9S271 H9J814 G6CYN2 G6CWA4	4	http://www.kegg.jp/kegg-bin/show_pathway?ko01212+K07511+K07511+K15013+K07515
ko00053	Ascorbate and aldarate metabolism	D2SNQ8 D2SNS6 G6CJU9 G9LPR1	4	http://www.kegg.jp/kegg-bin/show_pathway?ko00053+K00128+K00128+K00128+K00128

ko00051	Fructose and mannose metabolism	U5KC00 G6CIZ7 H9JFY6 G6D8L4	4	http://www.kegg.jp/kegg-bin/show_pathway?ko00051+K00011+K01803+K01711+K00008
ko05205	Proteoglycans in cancer	H9JR08 S4P8C3 G6CIX7 S4PTG2	4	http://www.kegg.jp/kegg-bin/show_pathway?ko05205+K12823+K04707+K10380+K03258
ko04024	cAMP signaling pathway	E3UJZ8 H9J971 H9IUC3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04024+K02183+K01540+K04498
ko04713	Circadian entrainment	E3UJZ8 Q8T9W9 O77129	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04713+K02183+K07376+K02633
ko04722	Neurotrophin signaling pathway	E3UJZ8 H9IZJ3 G6D5P3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04722+K02183+K06279+K06630
ko04910	Insulin signaling pathway	E3UJZ8 H9IZJ3 S4P8C3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04910+K02183+K06279+K04707
ko04970	Salivary secretion	E3UJZ8 Q8T9W9 H9J971	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04970+K02183+K07376+K01540
ko05152	Tuberculosis	E3UJZ8 G6D1T2 H9IUC3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05152+K02183+K04043+K04498
ko04621	NOD-like receptor signaling pathway	Q3V6C6 S4PEA4 H9U396	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04621+K04079+K12795+K09487
ko05215	Prostate cancer	Q3V6C6 H9U396 H9IUC3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05215+K04079+K09487+K04498
ko05164	Influenza A	Q8I6Y8 S4PL34 H9IUC3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05164+K03237+K14284+K04498
ko03430	Mismatch repair	Q8MYA5 S4PEX9 H9JPK6	3	http://www.kegg.jp/kegg-bin/show_pathway?ko03430+K04802+K02327+K10756
ko00480	Glutathione metabolism	S4PCX5 Q308N8 H9JBL2	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00480+K10808+K00799+K00031
ko04966	Collecting duct acid secretion	G6CKL7 E2IV54 G6CQI5	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04966+K02150+K02145+K02152
ko05120	Epithelial cell signaling in Helicobacter pylori infection	G6CKL7 E2IV54 G6CQI5	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05120+K02150+K02145+K02152
ko05323	Rheumatoid arthritis	G6CKL7 E2IV54 G6CQI5	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05323+K02150+K02145+K02152

ko00630	Glyoxylate and dicarboxylate metabolism	I4DP84 G6CTA2 S4PW23	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00630+K01647+K00600+K00600
ko01210	2-Oxocarboxylic acid metabolism	I4DP84 H9JBL2 G6CTV3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko01210+K01647+K00031+K00030
ko00830	Retinol metabolism	G0T406 H9JQH9 G9LPR1	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00830+K00121+K11147+K00699
ko00980	Metabolism of xenobiotics by cytochrome P450	G0T406 Q308N8 G9LPR1	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00980+K00121+K00799+K00699
ko00982	Drug metabolism - cytochrome P450	G0T406 Q308N8 G9LPR1	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00982+K00121+K00799+K00699
ko05204	Chemical carcinogenesis	G0T406 Q308N8 G9LPR1	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05204+K00121+K00799+K00699
ko00062	Fatty acid elongation	C9S271 H9J814 G6CWA4	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00062+K07511+K07511+K07515
ko00362	Benzoate degradation	C9S271 H9J814 G6CWA4	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00362+K07511+K07511+K07515
ko00627	Aminobenzoate degradation	C9S271 H9J814 G6CWA4	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00627+K07511+K07511+K07515
ko00650	Butanoate metabolism	C9S271 H9J814 G6CWA4	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00650+K07511+K07511+K07515
ko00930	Caprolactam degradation	C9S271 H9J814 G6CWA4	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00930+K07511+K07511+K07515
ko00030	Pentose phosphate pathway	D6BNT9 G6DFF9 H9IUJ6	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00030+K01810+K15779+K00616
ko00340	Histidine metabolism	D2SNQ8 D2SNS6 G6CJU9	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00340+K00128+K00128+K00128
ko00903	Limonene and pinene degradation	D2SNQ8 D2SNS6 G6CJU9	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00903+K00128+K00128+K00128
ko00710	Carbon fixation in photosynthetic organisms	G6CIZ7 F8UEY1 G6CY74	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00710+K01803+K00134+K00029
ko00260	Glycine, serine and threonine metabolism	G6CTA2 S4PW23 S4PS76	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00260+K00600+K00600+K00552

ko05206	MicroRNAs in cancer	H9IZJ3 V9VJY3 H9IUC3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05206+K06279+K11592+K04498
ko04919	Thyroid hormone signaling pathway	H9ISH7 H9J971 H9IUC3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04919+K11644+K01540+K04498
ko03022	Basal transcription factors	I4DNR5 Q1HPQ3 Q1HPY2	3	http://www.kegg.jp/kegg-bin/show_pathway?ko03022+K03139+K03123+K03126
ko05211	Renal cell carcinoma	H9IY28 H9JFB9 H9IUC3	3	http://www.kegg.jp/kegg-bin/show_pathway?ko05211+K03870+K01679+K04498
ko04260	Cardiac muscle contraction	E9LFS8 I4DNC1 H9J971	3	http://www.kegg.jp/kegg-bin/show_pathway?ko04260+K02256+K00413+K01540
ko00510	N-Glycan biosynthesis	H9J5V8 G6DQ02 S4PEG4	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00510+K07151+K12668+K03843
ko00513	Various types of N-glycan biosynthesis	H9J5V8 G6DQ02 S4PEG4	3	http://www.kegg.jp/kegg-bin/show_pathway?ko00513+K07151+K12668+K03843
ko04666	Fc gamma R-mediated phagocytosis	K9J9U2 G6D396	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04666+K05765+K05768
ko05133	Pertussis	K9J9U2 E3UJZ8	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05133+K05765+K02183
ko04014	Ras signaling pathway	E3UJZ8 H9IZJ3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04014+K02183+K06279
ko04114	Oocyte meiosis	E3UJZ8 G6D5P3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04114+K02183+K06630
ko04261	Adrenergic signaling in cardiomyocytes	E3UJZ8 H9J971	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04261+K02183+K01540
ko04720	Long-term potentiation	E3UJZ8 H9IUC3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04720+K02183+K04498
ko04740	Olfactory transduction	E3UJZ8 Q8T9W9	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04740+K02183+K07376
ko04916	Melanogenesis	E3UJZ8 H9IUC3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04916+K02183+K04498
ko04971	Gastric acid secretion	E3UJZ8 H9J971	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04971+K02183+K01540
ko05031	Amphetamine addiction	E3UJZ8 H9JAP5	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05031+K02183+K04560
ko05214	Glioma	E3UJZ8 H9IZJ3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05214+K02183+K06279
ko03410	Base excision repair	Q8MYA5 S4PEX9	2	http://www.kegg.jp/kegg-bin/show_pathway?ko03410+K04802+K02327

ko05161	Hepatitis B	Q8MYA5 H9IUC3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05161+K04802+K04498
ko00770	Pantothenate and CoA biosynthesis	S4PGL2 H9J9Q9	2	http://www.kegg.jp/kegg-bin/show_pathway?ko00770+K01922+K09680
ko05142	Chagas disease (American trypanosomiasis)	H9IT95 I4DMH6	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05142+K08057+K08057
ko04530	Tight junction	E3UKL7 H9JFV2	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04530+K10352+K06100
ko00860	Porphyrin and chlorophyll metabolism	E9KGW9 G9LPR1	2	http://www.kegg.jp/kegg-bin/show_pathway?ko00860+K14163+K00699
ko04961	Endocrine and other factor-regulated calcium reabsorption	I4DNY2 H9J971	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04961+K11826+K01540
ko00460	Cyanoamino acid metabolism	G6CTA2 S4PW23	2	http://www.kegg.jp/kegg-bin/show_pathway?ko00460+K00600+K00600
ko00670	One carbon pool by folate	G6CTA2 S4PW23	2	http://www.kegg.jp/kegg-bin/show_pathway?ko00670+K00600+K00600
ko00760	Nicotinate and nicotinamide metabolism	H9IV80 S4PE88	2	http://www.kegg.jp/kegg-bin/show_pathway?ko00760+K01950+K00763
ko04911	Insulin secretion	H9JAP5 H9J971	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04911+K04560+K01540
ko04012	ErbB signaling pathway	H9IZJ3 S4P8C3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04012+K06279+K04707
ko05100	Bacterial invasion of epithelial cells	H9IZJ3 S4P8C3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05100+K06279+K04707
ko05220	Chronic myeloid leukemia	H9IZJ3 S4P8C3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05220+K06279+K04707
ko05202	Transcriptional misregulation in cancer	H9JR08 H9ISH7	2	http://www.kegg.jp/kegg-bin/show_pathway?ko05202+K12823+K11644
ko03020	RNA polymerase	H9J1U7 G6DL52	2	http://www.kegg.jp/kegg-bin/show_pathway?ko03020+K03006+K03008
ko04630	Jak-STAT signaling pathway	S4P8C3 H9IUC3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04630+K04707+K04498

ko00564	Glycerophospholipid metabolism	H9JQK7 H9JEI1	2	http://www.kegg.jp/kegg-bin/show_pathway?ko00564+K00967+K14676
ko04390	Hippo signaling pathway	H9J2E4 G6D5P3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04390+K16687+K06630
ko04391	Hippo signaling pathway - fly	H9J2E4 G6D5P3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04391+K16687+K06630
ko04310	Wnt signaling pathway	G6DK55 H9IUC3	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04310+K04508+K04498
ko04146	Peroxisome	H9JQH9 H9JBL2	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04146+K11147+K00031
ko03320	PPAR signaling pathway	G6CYN2 H9ITJ2	2	http://www.kegg.jp/kegg-bin/show_pathway?ko03320+K15013+K00864
ko04150	mTOR signaling pathway	H9ISY0 S4PTG2	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04150+K08267+K03258
ko00720	Carbon fixation pathways in prokaryotes	H9JFB9 H9JBL2	2	http://www.kegg.jp/kegg-bin/show_pathway?ko00720+K01679+K00031
ko04918	Thyroid hormone synthesis	H9J971 H9U396	2	http://www.kegg.jp/kegg-bin/show_pathway?ko04918+K01540+K09487
ko04360	Axon guidance	K9J9U2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04360+K05765
ko04015	Rap1 signaling pathway	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04015+K02183
ko04070	Phosphatidylinositol signaling system	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04070+K02183
ko04270	Vascular smooth muscle contraction	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04270+K02183
ko04728	Dopaminergic synapse	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04728+K02183
ko04744	Phototransduction	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04744+K02183
ko04745	Phototransduction - fly	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04745+K02183
ko04750	Inflammatory mediator regulation of TRP channels	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04750+K02183
ko04912	GnRH signaling pathway	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04912+K02183
ko04921	Oxytocin signaling pathway	E3UJZ8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04921+K02183

ko04914	Progesterone-mediated oocyte maturation	Q3V6C6	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04914+K04079
ko05160	Hepatitis C	Q8I6Y8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko05160+K03237
ko05162	Measles	Q8I6Y8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko05162+K03237
ko04115	p53 signaling pathway	S4PCX5	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04115+K10808
ko00350	Tyrosine metabolism	G0T406	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00350+K00121
ko00626	Naphthalene degradation	G0T406	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00626+K00121
ko01220	Degradation of aromatic compounds	G0T406	1	http://www.kegg.jp/kegg-bin/show_pathway?ko01220+K00121
ko05146	Amoebiasis	B2X122	1	http://www.kegg.jp/kegg-bin/show_pathway?ko05146+K13963
ko00562	Inositol phosphate metabolism	G6CIZ7	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00562+K01803
ko04142	Lysosome	I4DQ01	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04142+K12399
ko04130	SNARE interactions in vesicular transport	H9JAP5	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04130+K04560
ko04062	Chemokine signaling pathway	H9IZJ3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04062+K06279
ko04510	Focal adhesion	H9IZJ3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04510+K06279
ko04650	Natural killer cell mediated cytotoxicity	H9IZJ3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04650+K06279
ko04917	Prolactin signaling pathway	H9IZJ3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04917+K06279
ko00512	Mucin type O-Glycan biosynthesis	S4PBL3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00512+K00710
ko04080	Neuroactive ligand-receptor interaction	G6DI16	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04080+K05236
ko04660	T cell receptor signaling pathway	S4P8C3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04660+K04707
ko00270	Cysteine and methionine metabolism	Q1HQB5	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00270+K00789

ko04140	Regulation of autophagy	J9XNW6	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04140+K08342
ko00563	Glycosylphosphatidylinositol (GPI)-anchor biosyntheses	G6CQB4	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00563+K05290
ko00440	Phosphonate and phosphinate metabolism	H9JQK7	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00440+K00967
ko04010	MAPK signaling pathway	G6CV32	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04010+K04461
ko04340	Hedgehog signaling pathway	G6D6P8	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04340+K08958
ko04540	Gap junction	Q8T9W9	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04540+K07376
ko04611	Platelet activation	Q8T9W9	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04611+K07376
ko04730	Long-term depression	Q8T9W9	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04730+K07376
ko03440	Homologous recombination	S4PEX9	1	http://www.kegg.jp/kegg-bin/show_pathway?ko03440+K02327
ko02020	Two-component system	I4DNC1	1	http://www.kegg.jp/kegg-bin/show_pathway?ko02020+K00413
ko04710	Circadian rhythm	077129	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04710+K02633
ko04711	Circadian rhythm - fly	077129	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04711+K02633
ko03060	Protein export	H9JFU5	1	http://www.kegg.jp/kegg-bin/show_pathway?ko03060+K13431
ko00061	Fatty acid biosyntheses	G6CYN2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00061+K15013
ko04920	Adipocytokine signaling pathway	G6CYN2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04920+K15013
ko03460	Fanconi anemia pathway	G6D6E9	1	http://www.kegg.jp/kegg-bin/show_pathway?ko03460+K02350
ko04111	Cell cycle - yeast	S4PXM6	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04111+K02542
ko04113	Meiosis - yeast	S4PXM6	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04113+K02542
ko04622	RIG-I-like receptor signaling pathway	S4PT88	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04622+K09578

ko01040	Biosynthesis of unsaturated fatty acids	G6CWA4	1	http://www.kegg.jp/kegg-bin/show_pathway?ko01040+K07515
ko04512	ECM-receptor interaction	S4PXE2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04512+K06265
ko05410	Hypertrophic cardiomyopathy (HCM)	S4PXE2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko05410+K06265
ko05412	Arrhythmogenic right ventricular cardiomyopathy (ARVC)	S4PXE2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko05412+K06265
ko05414	Dilated cardiomyopathy	S4PXE2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko05414+K06265
ko05416	Viral myocarditis	S4PXE2	1	http://www.kegg.jp/kegg-bin/show_pathway?ko05416+K06265
ko00730	Thiamine metabolism	H9J119	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00730+K04487
ko04122	Sulfur relay system	H9J119	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04122+K04487
ko00600	Sphingolipid metabolism	S4PD38	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00600+K00654
ko04960	Aldosterone-regulated sodium reabsorption	H9J971	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04960+K01540
ko04964	Proximal tubule bicarbonate reclamation	H9J971	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04964+K01540
ko04972	Pancreatic secretion	H9J971	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04972+K01540
ko04973	Carbohydrate digestion and absorption	H9J971	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04973+K01540
ko04974	Protein digestion and absorption	H9J971	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04974+K01540
ko04976	Bile secretion	H9J971	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04976+K01540
ko04978	Mineral absorption	H9J971	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04978+K01540
ko04068	FoxO signaling pathway	H9IUC3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04068+K04498
ko04330	Notch signaling pathway	H9IUC3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04330+K04498

ko04350	TGF-beta signaling pathway	H9IUC3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04350+K04498
ko04520	Adherens junction	H9IUC3	1	http://www.kegg.jp/kegg-bin/show_pathway?ko04520+K04498
ko00140	Steroid hormone biosynthesis	G9LPR1	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00140+K00699
ko00983	Drug metabolism - other enzymes	G9LPR1	1	http://www.kegg.jp/kegg-bin/show_pathway?ko00983+K00699