

Biological Process	NCBI: H. sapiens genes - REFLIST (25431 genes)	transcripts (448 genes)	transcripts (genes expected)	transcripts (over/under)	transcripts (P-value)
Biological process unclassified	11321	102	199	-	0.0000
Signal transduction	3406	107	60	+	0.0000
Cell communication	1213	45	21	+	0.0004
Nucleoside, nucleotide and nucleic	3343	90	59	+	0.0008
Neurogenesis	587	27	10	+	0.0017
Phosphate transport	17	5	0	+	0.0022
Ion transport	616	26	11	+	0.0074
Apoptosis	531	22	9	+	0.0076
Ectoderm development	692	28	12	+	0.0079
Immunity and defense	1318	41	23	+	0.0113
Transport	1306	40	23	+	0.0180
Nerve-nerve synaptic transmission	81	8	1	+	0.0230
Protein phosphorylation	660	26	12	+	0.0301
Cation transport	482	21	8	+	0.0346
Phosphate metabolism	117	8	2	+	0.0396
Ligand-mediated signaling	421	19	7	+	0.0452
Protein modification	1157	37	20	+	0.0620
Intracellular signaling cascade	871	30	15	+	0.0676
Inhibition of apoptosis	128	9	2	+	0.0774
Homeostasis	196	10	3	+	0.0895
Neuronal activities	569	20	10	+	0.0983
Developmental processes	2152	55	38	+	0.1140
Cytokine and chemokine mediated	252	13	4	+	0.1310
Cell surface receptor mediated sigr	1638	45	29	+	0.3390
NF-kappaB cascade	71	6	1	+	0.3580
Intracellular protein traffic	1008	28	18	+	0.4060
Cell cycle	1009	27	18	+	0.6920
Amino acid metabolism	230	9	4	+	0.6940
Protein metabolism and modificatic	3040	68	54	+	0.7390
Extracellular transport and import	89	6	2	+	0.7820
Receptor protein tyrosine kinase si	211	9	4	+	1.0000
G-protein mediated signaling	834	16	15	+	1.0000
Oncogene	122	4	2	+	1.0000
Tumor suppressor	102	3	2	+	1.0000
Sulfur metabolism	93	2	2	+	1.0000
Protein glycosylation	193	7	3	+	1.0000
Cytokine/chemokine mediated imm	125	6	2	+	1.0000
Induction of apoptosis	165	8	3	+	1.0000
Sex determination	14	1	0	+	1.0000
Heart development	51	2	1	+	1.0000
Metabolism of cyclic nucleotides	45	2	1	+	1.0000
rRNA metabolism	66	3	1	+	1.0000
tRNA metabolism	42	2	1	+	1.0000

RNA localization	33	2	1	+	1.0000
Reverse transcription	9	1	0	+	1.0000
mRNA end-processing and stability	20	2	0	+	1.0000
Mesoderm development	551	12	10	+	1.0000
Anterior/posterior patterning	67	2	1	+	1.0000
Determination of dorsal/ventral axis	16	1	0	+	1.0000
mRNA polyadenylation	28	1	0	+	1.0000
mRNA splicing	214	5	4	+	1.0000
Pre-mRNA processing	291	8	5	+	1.0000
Fertilization	41	1	1	+	1.0000
mRNA transcription regulation	1459	33	26	+	1.0000
mRNA transcription elongation	44	1	1	+	1.0000
General mRNA transcription activiti	45	2	1	+	1.0000
mRNA transcription	1914	48	34	+	1.0000
Other apoptosis	14	1	0	+	1.0000
DNA recombination	44	1	1	+	1.0000
DNA repair	169	4	3	+	1.0000
DNA replication	155	3	3	+	1.0000
Spermatogenesis and motility	129	4	2	+	1.0000
DNA metabolism	360	7	6	+	1.0000
Pyrimidine metabolism	42	2	1	+	1.0000
Purine metabolism	65	3	1	+	1.0000
Gametogenesis	241	6	4	+	1.0000
Cell proliferation and differentiation	1028	26	18	+	1.0000
Angiogenesis	54	1	1	+	1.0000
Lipid and fatty acid transport	131	3	2	+	1.0000
Vision	199	6	4	+	1.0000
Fatty acid metabolism	187	6	3	+	1.0000
Detoxification	71	2	1	+	1.0000
Lipid, fatty acid and steroid metabo	770	17	14	+	1.0000
Other amino acid metabolism	30	1	1	+	1.0000
Miscellaneous	140	3	2	+	1.0000
Amino acid catabolism	50	2	1	+	1.0000
Amino acid transport	47	2	1	+	1.0000
Stress response	200	5	4	+	1.0000
Blood clotting	92	3	2	+	1.0000
Other neuronal activity	136	6	2	+	1.0000
Cell cycle control	418	14	7	+	1.0000
Chromosome segregation	121	3	2	+	1.0000
Other polysaccharide metabolism	142	6	3	+	1.0000
Other developmental process	104	2	2	+	1.0000
Tricarboxylic acid pathway	36	1	1	+	1.0000
Skeletal development	123	3	2	+	1.0000
Lactation, mammary development	13	1	0	+	1.0000
Gluconeogenesis	17	2	0	+	1.0000
Glycolysis	46	1	1	+	1.0000

Synaptic transmission	279	11	5	+	1.0000
Carbohydrate transport	50	1	1	+	1.0000
Carbohydrate metabolism	592	13	10	+	1.0000
Other immune and defense	153	5	3	+	1.0000
Interferon-mediated immunity	63	2	1	+	1.0000
Complement-mediated immunity	56	2	1	+	1.0000
B-cell- and antibody-mediated imm	97	3	2	+	1.0000
T-cell mediated immunity	194	4	3	+	1.0000
Other transport	61	2	1	+	1.0000
Anion transport	90	5	2	+	1.0000
Other protein targeting and localiza	18	1	0	+	1.0000
Asymmetric protein localization	20	1	0	+	1.0000
Protein targeting	113	3	2	+	1.0000
Protein targeting and localization	253	6	4	+	1.0000
Other intracellular protein traffic	62	3	1	+	1.0000
Mitochondrial transport	27	1	0	+	1.0000
Nuclear transport	135	4	2	+	1.0000
Receptor mediated endocytosis	111	4	2	+	1.0000
Other sulfur metabolism	17	1	0	+	1.0000
Calcium ion homeostasis	38	3	1	+	1.0000
Lipid metabolism	151	4	3	+	1.0000
Nitric oxide biosynthesis	7	1	0	+	1.0000
Nitrogen metabolism	21	1	0	+	1.0000
Endocytosis	277	10	5	+	1.0000
Other metabolism	559	11	10	+	1.0000
Granulocyte-mediated immunity	64	2	1	+	1.0000
Cell motility	352	12	6	+	1.0000
Cell adhesion	622	16	11	+	1.0000
Cell structure and motility	1148	25	20	+	1.0000
Other signal transduction	71	2	1	+	1.0000
Cell adhesion-mediated signaling	379	13	7	+	1.0000
Mitosis	382	9	7	+	1.0000
Oncogenesis	472	11	8	+	1.0000
Other pathways of electron transpc	20	2	0	+	1.0000
Other intracellular signaling cascad	225	6	4	+	1.0000
NO mediated signal transduction	10	2	0	+	1.0000
JAK-STAT cascade	85	4	2	+	1.0000
JNK cascade	61	2	1	+	1.0000
Phagocytosis	39	3	1	+	1.0000
General vesicle transport	251	7	4	+	1.0000
MAPKKK cascade	181	7	3	+	1.0000
Extracellular matrix protein-mediat	62	2	1	+	1.0000
Calcium mediated signaling	116	4	2	+	1.0000
Chromatin packaging and remodeli	237	10	4	+	1.0000
Phospholipid metabolism	151	4	3	+	1.0000
Other receptor mediated signaling	210	4	4	+	1.0000

Other homeostasis activities	69	3	1	+	1.0000
Other protein metabolism	48	1	1	+	1.0000
Amino acid activation	38	1	1	+	1.0000
Proteolysis	960	18	17	+	1.0000
Receptor protein serine/threonine k	40	0	1	-	1.0000
Non-vertebrate process	20	0	0	-	1.0000
Glucose homeostasis	20	0	0	-	1.0000
Antioxidation and free radical remo	38	0	1	-	1.0000
Protein disulfide-isomerase reactio	17	0	0	-	1.0000
Other phosphate metabolism	1	0	0	-	1.0000
Protein ADP-ribosylation	10	0	0	-	1.0000
Protein acetylation	29	0	1	-	1.0000
Protein methylation	10	0	0	-	1.0000
Protein folding	186	3	3	-	1.0000
Protein biosynthesis	591	8	10	-	1.0000
RNA catabolism	65	0	1	-	1.0000
Apoptotic processes	18	0	0	-	1.0000
Other nucleoside, nucleotide and n	29	0	1	-	1.0000
Nucleoside, nucleotide and nucleic	58	1	1	-	1.0000
Regulation of nucleoside, nucleotid	15	0	0	-	1.0000
Muscle development	143	0	3	-	1.0000
mRNA capping	3	0	0	-	1.0000
Gut mesoderm development	14	0	0	-	1.0000
Endoderm development	12	0	0	-	1.0000
Segment specification	100	1	2	-	1.0000
Embryogenesis	141	2	2	-	1.0000
Other mRNA transcription	21	0	0	-	1.0000
mRNA transcription termination	10	0	0	-	1.0000
mRNA transcription initiation	73	1	1	-	1.0000
DNA degradation	12	0	0	-	1.0000
Oogenesis	65	1	1	-	1.0000
Meiosis	84	1	1	-	1.0000
Other lipid, fatty acid and steroid m	25	0	0	-	1.0000
Other sensory perception	15	0	0	-	1.0000
Pain sensation	32	0	1	-	1.0000
Lipid and fatty acid binding	27	0	0	-	1.0000
Regulation of lipid, fatty acid and st	27	0	0	-	1.0000
Hearing	39	0	1	-	1.0000
Cholesterol metabolism	68	1	1	-	1.0000
Pheromone response	9	0	0	-	1.0000
Acyl-CoA metabolism	22	0	0	-	1.0000
Fatty acid desaturation	4	0	0	-	1.0000
Taste	7	0	0	-	1.0000
Fatty acid beta-oxidation	27	0	0	-	1.0000
Olfaction	198	0	3	-	1.0000
Fatty acid biosynthesis	14	0	0	-	1.0000

Chemosensory perception	207	0	4	-	1.0000
Sensory perception	506	6	9	-	1.0000
Other blood circulation and gas exc	18	0	0	-	1.0000
Amino acid metabolism regulation	2	0	0	-	1.0000
Amino acid biosynthesis	46	0	1	-	1.0000
Other carbohydrate metabolism	56	0	1	-	1.0000
Regulation of vasoconstriction, dila	43	0	1	-	1.0000
Monosaccharide metabolism	43	0	1	-	1.0000
Muscle contraction	198	2	3	-	1.0000
Disaccharide metabolism	5	0	0	-	1.0000
Action potential propagation	23	0	0	-	1.0000
Neuromuscular synaptic transmissi	23	0	0	-	1.0000
Blood circulation and gas exchange	89	0	2	-	1.0000
Other cell cycle process	9	0	0	-	1.0000
Cytokinesis	115	2	2	-	1.0000
Pentose-phosphate shunt	10	0	0	-	1.0000
Neurotransmitter release	107	1	2	-	1.0000
Regulation of carbohydrate metabo	13	0	0	-	1.0000
Natural killer cell mediated immunit	74	1	1	-	1.0000
Macrophage-mediated immunity	140	2	2	-	1.0000
MHCII-mediated immunity	34	0	1	-	1.0000
MHCI-mediated immunity	22	0	0	-	1.0000
Small molecule transport	134	1	2	-	1.0000
Steroid hormone metabolism	45	0	1	-	1.0000
Glycogen metabolism	52	0	1	-	1.0000
Other steroid metabolism	13	0	0	-	1.0000
Bile acid metabolism	1	0	0	-	1.0000
Steroid metabolism	183	3	3	-	1.0000
Other carbon metabolism	82	1	1	-	1.0000
Polyphosphate biosynthesis	3	0	0	-	1.0000
Regulation of phosphate metabolis	3	0	0	-	1.0000
Polyphosphate catabolism	3	0	0	-	1.0000
Other nitrogen metabolism	2	0	0	-	1.0000
Nitrogen utilization	6	0	0	-	1.0000
Constitutive exocytosis	11	0	0	-	1.0000
Regulated exocytosis	48	0	1	-	1.0000
Exocytosis	163	0	3	-	1.0000
Cell structure	687	11	12	-	1.0000
Hematopoiesis	75	1	1	-	1.0000
Other oncogenesis	69	1	1	-	1.0000
Steroid hormone-mediated signalin	52	0	1	-	1.0000
Other coenzyme and prosthetic grc	9	0	0	-	1.0000
Vitamin/cofactor transport	48	0	1	-	1.0000
Lysosome transport	12	0	0	-	1.0000
Porphyrin metabolism	15	0	0	-	1.0000
Pterin metabolism	8	0	0	-	1.0000

Vitamin catabolism	1	0	0	-	1.0000
Vitamin biosynthesis	21	0	0	-	1.0000
Vitamin metabolism	42	0	1	-	1.0000
Coenzyme metabolism	61	0	1	-	1.0000
Coenzyme and prosthetic group m	174	0	3	-	1.0000
Peroxisome transport	14	0	0	-	1.0000
Pinocytosis	7	0	0	-	1.0000
Sulfur redox metabolism	20	0	0	-	1.0000
Ferredoxin metabolism	4	0	0	-	1.0000
Oxidative phosphorylation	78	0	1	-	1.0000
Growth factor homeostasis	7	0	0	-	1.0000
Electron transport	252	4	4	-	1.0000
Translational regulation	88	1	2	-	1.0000
Protein complex assembly	68	1	1	-	1.0000
Protein-lipid modification	21	0	0	-	1.0000