

ID	Term	p-value	Group p-value	GOLevels	Group	%	#
GO:0008528	G protein-coupled peptide receptor activity	1,78E-29	1,04E-30	[5, 6, 7]	0	4118,00	63,00
GO:0051259	protein complex oligomerization	1,03E-08	6,75E-10	[6]	1	1949,00	54,00
GO:0007188	adenylate cyclase-modulating G protein-coupled receptor signaling pathway	1,27E-27	6,06E-29	[4, 5, 6]	2	3077,00	80,00
GO:0007189	adenylate cyclase-activating G protein-coupled receptor signaling pathway	7,50E-23	6,06E-29	[5, 6, 7]	2	3537,00	58,00
GO:0043067	regulation of programmed cell death	1,56E-03	4,46E-05	[4, 5]	3	397,00	63,00
GO:0042981	regulation of apoptotic process	1,60E-03	4,46E-05	[5, 6]	3	393,00	61,00
GO:0051050	positive regulation of transport	6,72E-02	5,53E-10	[2, 3, 4, 5]	4	1045,00	102,00
GO:0023061	signal release	2,47E-03	5,53E-10	[3, 4, 6]	4	1294,00	66,00
GO:0051046	regulation of secretion	5,99E-04	5,53E-10	[4, 5]	4	1244,00	82,00
GO:0099537	trans-synaptic signaling	1,32E-04	5,53E-10	[4, 5]	4	1218,00	96,00
GO:1903530	regulation of secretion by cell	7,91E-03	5,53E-10	[3, 4, 5, 6]	4	1211,00	73,00
GO:0007268	chemical synaptic transmission	1,60E-04	5,53E-10	[6, 7]	4	1220,00	95,00
GO:0007186	G protein-coupled receptor signaling pathway	7,37E-266	6,00E-282	[3, 4, 5]	5	3813,00	506,00
GO:0050906	detection of stimulus involved in sensory perception	4,28E-235	6,00E-282	[3, 5]	5	5811,00	326,00
GO:0004930	G protein-coupled receptor activity	0,00E+00	6,00E-282	[4, 5, 6]	5	5318,00	476,00
GO:0007606	sensory perception of chemical stimulus	2,35E-244	6,00E-282	[5]	5	5989,00	330,00
GO:0050907	detection of chemical stimulus involved in sensory perception	9,97E-235	6,00E-282	[4, 6]	5	6265,00	307,00
GO:0007608	sensory perception of smell	6,14E-212	6,00E-282	[6]	5	6103,00	285,00
GO:0050911	detection of chemical stimulus involved in sensory perception of smell	8,59E-215	6,00E-282	[5, 7]	5	6370,00	279,00
GO:0051050	positive regulation of transport	6,72E-02	1,06E-59	[2, 3, 4, 5]	6	1045,00	102,00
GO:0034762	regulation of transmembrane transport	2,00E-30	1,06E-59	[3, 4, 5]	6	2170,00	135,00
GO:0023061	signal release	2,47E-03	1,06E-59	[3, 4, 6]	6	1294,00	66,00
GO:0043269	regulation of ion transport	2,41E-33	1,06E-59	[4, 5]	6	2086,00	155,00
GO:0043270	positive regulation of ion transport	5,01E-06	1,06E-59	[3, 4, 5, 6]	6	1716,00	52,00
GO:0051046	regulation of secretion	5,99E-04	1,06E-59	[4, 5]	6	1244,00	82,00
GO:1903530	regulation of secretion by cell	7,91E-03	1,06E-59	[3, 4, 5, 6]	6	1211,00	73,00
GO:0006812	cation transport	1,38E-70	1,06E-59	[5]	6	2180,00	283,00
GO:0034765	regulation of ion transmembrane transport	2,32E-34	1,06E-59	[4, 5, 6]	6	2434,00	129,00
GO:0098660	inorganic ion transmembrane transport	7,75E-77	1,06E-59	[4, 6]	6	2505,00	257,00
GO:0010959	regulation of metal ion transport	7,58E-06	1,06E-59	[5, 6, 7]	6	1508,00	65,00
GO:0030001	metal ion transport	4,83E-66	1,06E-59	[6]	6	2403,00	236,00
GO:0098662	inorganic cation transmembrane transport	3,40E-66	1,06E-59	[5, 7]	6	2468,00	229,00
GO:1904062	regulation of cation transmembrane transport	7,59E-06	1,06E-59	[5, 6, 7]	6	1538,00	62,00
GO:0070588	calcium ion transmembrane transport	1,05E-26	1,06E-59	[6, 8]	6	2526,00	98,00

GO:0072503	cellular divalent inorganic cation homeostasis	1,52E-16	1,06E-59	[6, 8]	6	2222,00	76,00
GO:0005261	cation channel activity	3,71E-64	1,06E-59	[6, 7, 8, 9]	6	3049,00	175,00
GO:0009891	positive regulation of biosynthetic process	1,46E-13	5,78E-82	[3, 4, 5]	7	296,00	65,00
GO:0009966	regulation of signal transduction	1,60E-04	5,78E-82	[3, 4, 5]	7	469,00	148,00
GO:0010604	positive regulation of macromolecule metabolic process	1,46E-21	5,78E-82	[3, 4, 5]	7	328,00	122,00
GO:0031325	positive regulation of cellular metabolic process	1,58E-19	5,78E-82	[3, 4, 5]	7	318,00	104,00
GO:0051173	positive regulation of nitrogen compound metabolic process	1,38E-23	5,78E-82	[3, 4, 5]	7	291,00	97,00
GO:0010468	regulation of gene expression	5,85E-58	5,78E-82	[4, 5]	7	229,00	117,00
GO:0010556	regulation of macromolecule biosynthetic process	4,39E-62	5,78E-82	[4, 5]	7	164,00	68,00
GO:0019219	regulation of nucleobase-containing compound metabolic process	2,87E-64	5,78E-82	[4, 5]	7	163,00	69,00
GO:0031326	regulation of cellular biosynthetic process	1,30E-49	5,78E-82	[4, 5]	7	219,00	95,00
GO:0034654	nucleobase-containing compound biosynthetic process	1,07E-50	5,78E-82	[4, 5]	7	209,00	88,00
GO:0036211	protein modification process	7,18E-15	5,78E-82	[4, 5]	7	382,00	146,00
GO:0051246	regulation of protein metabolic process	6,66E-13	5,78E-82	[4, 5]	7	344,00	95,00
GO:0090304	nucleic acid metabolic process	1,42E-94	5,78E-82	[4, 5]	7	140,00	74,00
GO:0016310	phosphorylation	7,36E-09	5,78E-82	[5]	7	337,00	67,00
GO:0031328	positive regulation of cellular biosynthetic process	7,33E-15	5,78E-82	[4, 5, 6]	7	278,00	60,00
GO:0051247	positive regulation of protein metabolic process	2,78E-02	5,78E-82	[4, 5, 6]	7	429,00	69,00
GO:0006468	protein phosphorylation	5,38E-06	5,78E-82	[5, 6]	7	355,00	60,00
GO:0016070	RNA metabolic process	7,82E-82	5,78E-82	[5, 6]	7	140,00	66,00
GO:0031399	regulation of protein modification process	3,31E-05	5,78E-82	[5, 6]	7	367,00	61,00
GO:0051252	regulation of RNA metabolic process	1,14E-64	5,78E-82	[4, 5, 6, 7]	7	141,00	55,00
GO:0042325	regulation of phosphorylation	7,39E-02	5,78E-82	[6, 7]	7	419,00	56,00
GO:0006351	transcription, DNA-templated	6,52E-59	5,78E-82	[6, 7, 8, 9]	7	148,00	55,00
GO:0006355	regulation of transcription, DNA-templated	4,81E-56	5,78E-82	[5, 6, 7, 8, 9, 10]	7	150,00	54,00
GO:0051050	positive regulation of transport	6,72E-02	5,50E-74	[2, 3, 4, 5]	8	1045,00	102,00
GO:0022857	transmembrane transporter activity	6,82E-102	5,50E-74	[3, 5]	8	2406,00	345,00
GO:0034220	ion transmembrane transport	1,78E-89	5,50E-74	[3, 5]	8	2375,00	313,00
GO:0034762	regulation of transmembrane transport	2,00E-30	5,50E-74	[3, 4, 5]	8	2170,00	135,00
GO:0055082	cellular chemical homeostasis	6,26E-21	5,50E-74	[3, 5]	8	1813,00	128,00
GO:0098739	import across plasma membrane	1,57E-29	5,50E-74	[3, 5]	8	3600,00	72,00
GO:0043269	regulation of ion transport	2,41E-33	5,50E-74	[4, 5]	8	2086,00	155,00
GO:0043270	positive regulation of ion transport	5,01E-06	5,50E-74	[3, 4, 5, 6]	8	1716,00	52,00
GO:0006812	cation transport	1,38E-70	5,50E-74	[5]	8	2180,00	283,00
GO:0006820	anion transport	1,28E-22	5,50E-74	[5]	8	2010,00	116,00

GO:0006873	cellular ion homeostasis	1,22E-22	5,50E-74 [4, 6]	8	2059,00	112,00
GO:0015075	ion transmembrane transporter activity	5,03E-86	5,50E-74 [4, 6]	8	2498,00	285,00
GO:0015318	inorganic molecular entity transmembrane transporter activity	2,78E-84	5,50E-74 [4, 6]	8	2602,00	267,00
GO:0015849	organic acid transport	9,60E-12	5,50E-74 [5]	8	1949,00	69,00
GO:0019932	second-messenger-mediated signaling	1,01E-13	5,50E-74 [4, 5, 6]	8	2011,00	75,00
GO:0022803	passive transmembrane transporter activity	9,09E-82	5,50E-74 [4, 6]	8	2979,00	224,00
GO:0022804	active transmembrane transporter activity	9,44E-20	5,50E-74 [4, 6]	8	2105,00	96,00
GO:0034765	regulation of ion transmembrane transport	2,32E-34	5,50E-74 [4, 5, 6]	8	2434,00	129,00
GO:0050801	ion homeostasis	1,50E-27	5,50E-74 [5]	8	2042,00	135,00
GO:0098655	cation transmembrane transport	9,57E-75	5,50E-74 [4, 6]	8	2430,00	260,00
GO:0098656	anion transmembrane transport	5,17E-23	5,50E-74 [4, 6]	8	2372,00	93,00
GO:0098660	inorganic ion transmembrane transport	7,75E-77	5,50E-74 [4, 6]	8	2505,00	257,00
GO:0015711	organic anion transport	1,40E-14	5,50E-74 [5, 6]	8	1995,00	80,00
GO:1905039	carboxylic acid transmembrane transport	1,62E-12	5,50E-74 [4, 6, 7]	8	2420,00	53,00
GO:0008324	cation transmembrane transporter activity	9,82E-74	5,50E-74 [5, 7]	8	2602,00	237,00
GO:0008509	anion transmembrane transporter activity	1,24E-23	5,50E-74 [5, 7]	8	2521,00	88,00
GO:0010959	regulation of metal ion transport	7,58E-06	5,50E-74 [5, 6, 7]	8	1508,00	65,00
GO:0015291	secondary active transmembrane transporter activity	3,24E-09	5,50E-74 [5, 7]	8	2031,00	53,00
GO:0015698	inorganic anion transport	4,24E-17	5,50E-74 [6]	8	2757,00	59,00
GO:0019722	calcium-mediated signaling	7,76E-13	5,50E-74 [5, 6, 7]	8	2302,00	58,00
GO:0022853	active ion transmembrane transporter activity	3,06E-15	5,50E-74 [5, 7]	8	2262,00	69,00
GO:0030001	metal ion transport	4,83E-66	5,50E-74 [6]	8	2403,00	236,00
GO:0030003	cellular cation homeostasis	1,25E-21	5,50E-74 [5, 7]	8	2053,00	108,00
GO:0055080	cation homeostasis	5,09E-25	5,50E-74 [6]	8	2009,00	127,00
GO:0098662	inorganic cation transmembrane transport	3,40E-66	5,50E-74 [5, 7]	8	2468,00	229,00
GO:0098771	inorganic ion homeostasis	2,55E-27	5,50E-74 [6]	8	2052,00	133,00
GO:1904062	regulation of cation transmembrane transport	7,59E-06	5,50E-74 [5, 6, 7]	8	1538,00	62,00
GO:0005216	ion channel activity	8,67E-71	5,50E-74 [5, 6, 7, 8]	8	2902,00	202,00
GO:0015103	inorganic anion transmembrane transporter activity	8,99E-16	5,50E-74 [5, 6, 7, 8]	8	2889,00	52,00
GO:0022890	inorganic cation transmembrane transporter activity	7,49E-71	5,50E-74 [5, 6, 7, 8]	8	2628,00	226,00
GO:0046942	carboxylic acid transport	8,49E-11	5,50E-74 [6, 7]	8	1975,00	63,00
GO:0098659	inorganic cation import across plasma membrane	5,15E-26	5,50E-74 [5, 6, 7, 8]	8	4380,00	53,00
GO:0006875	cellular metal ion homeostasis	3,05E-17	5,50E-74 [6, 8]	8	2032,00	90,00
GO:0008514	organic anion transmembrane transporter activity	3,89E-14	5,50E-74 [6, 7, 8]	8	2667,00	52,00
GO:0022836	gated channel activity	1,53E-64	5,50E-74 [6, 8]	8	3320,00	161,00

GO:0035725	sodium ion transmembrane transport	3,99E-20	5,50E-74	[6, 8]	8	2833,00	66,00
GO:0070588	calcium ion transmembrane transport	1,05E-26	5,50E-74	[6, 8]	8	2526,00	98,00
GO:0071805	potassium ion transmembrane transport	6,62E-36	5,50E-74	[6, 8]	8	3566,00	87,00
GO:0072503	cellular divalent inorganic cation homeostasis	1,52E-16	5,50E-74	[6, 8]	8	2222,00	76,00
GO:0005244	voltage-gated ion channel activity	4,65E-39	5,50E-74	[5, 7, 8, 10]	8	3390,00	99,00
GO:0005261	cation channel activity	3,71E-64	5,50E-74	[6, 7, 8, 9]	8	3049,00	175,00
GO:0046873	metal ion transmembrane transporter activity	2,79E-71	5,50E-74	[6, 7, 8, 9]	8	3031,00	194,00
GO:0015276	ligand-gated ion channel activity	4,96E-23	5,50E-74	[6, 7, 8, 9, 10]	8	2991,00	70,00
GO:0022843	voltage-gated cation channel activity	1,69E-26	5,50E-74	[6, 7, 8, 9, 10, 11]	8	3151,00	75,00