

**Table S1 The information of known DEGs**

id	D6_fpkm	M6_fpkm	log2(FC)	Symbol	Description
ENSSSCT00000000144	5.41	0.113333	-5.57698	PVALB	parvalbumin [Source:HGNC Symbol;Acc:HGNC:9704]
ENSSSCT00000000392	0.001	1.236667	10.27224	PYM1	PYM homolog 1, exon junction complex associated factor [Source:HGNC Symbol;Acc:HGNC:30258]
ENSSSCT00000000934	0.016667	1.836667	6.78398	PAH	phenylalanine hydroxylase [Source:HGNC Symbol;Acc:HGNC:8582]
ENSSSCT00000001193	0.001	0.253333	7.984893	FAM65B	family with sequence similarity 65, member B [Source:HGNC Symbol;Acc:HGNC:13872]
ENSSSCT00000001329	56.90333	125.35	1.139377	TMP-CH242-74M17.2	-
ENSSSCT00000001927	7.633333	20.51333	1.426177	PLA2G7	phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma) [Source:HGNC Symbol;Acc:HGNC:9040]
ENSSSCT00000002252	15.03	44.52667	1.566825	DHRS4	Dehydrogenase/reductase SDR family member 4 [Source:UniProtKB/Swiss-Prot;Acc:Q8WNV7]
ENSSSCT00000002510	0.83	0.003333	-7.96	NR2F2	nuclear receptor subfamily 2, group F, member 2 [Source:HGNC Symbol;Acc:HGNC:7976]
ENSSSCT00000002650	97.94	2.403333	-5.34879	FOS	-
ENSSSCT00000002713	0.243333	0.001	-7.92679	TC2N	tandem C2 domains, nuclear [Source:HGNC Symbol;Acc:HGNC:19859]
ENSSSCT00000002808	0.001	664.8433	19.34265	-	40S ribosomal protein S21 [Source:UniProtKB/Swiss-Prot;Acc:P63221]
ENSSSCT00000002812	0.03	2.223333	6.211618	ZNF839	zinc finger protein 839 [Source:HGNC Symbol;Acc:HGNC:20345]
ENSSSCT00000003504	21.79	5.06	-2.10646	PPP1R15A	protein phosphatase 1, regulatory subunit 15A

ENSSSCT00000003939	83.85667	367.88	2.133238	-	-	[Source:HGNC Symbol;Acc:HGNC:14375]
ENSSSCT00000004174	0.001	1.026667	10.00375	ZZZ3	-	zinc finger, ZZ-type containing 3 [Source:HGNC Symbol;Acc:HGNC:24523]
ENSSSCT00000004436	5.663333	1.893333	-1.58072	THBS2	-	thrombospondin 2 [Source:HGNC Symbol;Acc:HGNC:11786]
ENSSSCT00000005271	0.77	0.001	-9.58871	BAHD1	-	bromo adjacent homology domain containing 1 [Source:HGNC Symbol;Acc:HGNC:29153]
ENSSSCT00000005288	15.11333	4.053333	-1.89864	THBS1	-	-
ENSSSCT00000005633	0.13	0.001	-7.02237	SYNE2	-	spectrin repeat containing, nuclear envelope 2 [Source:HGNC Symbol;Acc:HGNC:17084]
ENSSSCT00000005967	16.36333	55.52667	1.762714	NIPSNAP3B	-	nipsnap homolog 3B (C. elegans) [Source:HGNC Symbol;Acc:HGNC:23641]
ENSSSCT00000006226	3.243333	10.48	1.69209	CCBL1	-	cysteine conjugate-beta lyase, cytoplasmic [Source:HGNC Symbol;Acc:HGNC:1564]
ENSSSCT00000006644	27.02333	9.63	-1.4886	KLF10	-	-
ENSSSCT00000006699	16.11667	36.75	1.189191	PDP1	-	pyruvate dehydrogenase phosphatase catalytic subunit 1 [Source:HGNC Symbol;Acc:HGNC:9279]
ENSSSCT00000006706	0.001	1.856667	10.8585	CU207250.1	-	-
ENSSSCT00000006733	7.126667	2.496667	-1.51322	CA2	-	carbonic anhydrase II [Source:HGNC Symbol;Acc:HGNC:1373]
ENSSSCT00000006967	0.001	0.556667	9.12067	NDUFS2	-	NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kDa (NADH-coenzyme Q reductase) [Source:HGNC Symbol;Acc:HGNC:7708]
ENSSSCT00000007206	0.403333	5.16	3.677327	S100A4	-	S100 calcium binding protein A4 [Source:HGNC Symbol;Acc:HGNC:10494]
ENSSSCT00000007534	0.001	1.286667	10.32942	-	-	-
ENSSSCT00000007573	0.001	0.353333	8.464886	-	-	-

ENSSSCT00000007604	7.406667	0.753333	-3.29746	CYR61	cysteine-rich, angiogenic inducer, 61 [Source:HGNC Symbol;Acc:HGNC:2654]
ENSSSCT00000007834	0.936667	0.001	-9.87139	-	-
ENSSSCT00000008247	0.756667	0.001	-9.56351	GNAS	Sus scrofa GNAS complex locus (GNAS), transcript variant 1, mRNA. [Source:RefSeq mRNA;Acc:NM_214312]
ENSSSCT00000008741	49.60667	227.2367	2.19559	HBQ1	hemoglobin, theta 1 [Source:HGNC Symbol;Acc:HGNC:4833]
ENSSSCT00000008947	9.223333	1.52	-2.60122	-	60S ribosomal protein L31 [Source:UniProtKB/Swiss-Prot;Acc:P62901]
ENSSSCT00000009163	101.1733	243.73	1.268455	-	-
ENSSSCT00000009164	68.20333	174.8767	1.358424	-	-
ENSSSCT00000009339	0.466667	5.57	3.577213	CLIP4	CAP-GLY domain containing linker protein family, member 4 [Source:HGNC Symbol;Acc:HGNC:26108]
ENSSSCT00000009375	50.39	124.28	1.302385	HADHB	long-chain 3-ketoacyl-CoA thiolase [Source:RefSeq peptide;Acc:NP_999131]
ENSSSCT00000009461	1.64	7.583333	2.209136	RSAD2	-
ENSSSCT00000009813	4.433333	0.153333	-4.85365	CXCL2	C-X-C motif chemokine 2 precursor [Source:RefSeq peptide;Acc:NP_001001861]
ENSSSCT00000009859	0.001	1.023333	9.99906	TLR2	toll-like receptor 2 [Source:HGNC Symbol;Acc:HGNC:11848]
ENSSSCT00000009885	0.001	1.533333	10.58246	-	-
ENSSSCT00000010013	0.003333	0.92	8.108524	ETNPPL	ethanolamine-phosphate phospho-lyase [Source:HGNC Symbol;Acc:HGNC:14404]
ENSSSCT00000010151	1.303333	0.001	-10.348	-	-
ENSSSCT00000010229	19.25667	8.03	-1.26189	HSPH1	heat shock protein 105 kDa [Source:RefSeq peptide;Acc:NP_001090973]
ENSSSCT00000010558	0.001	6.673333	12.70419	PEBP4	Sus scrofa phosphatidylethanolamine-binding protein 4 (PEBP4),

ENSSSCT00000010832	3.103333	9.783333	1.656507	OAS1	mRNA. [Source:RefSeq mRNA;Acc:NM_001162888] 2'-5'-oligoadenylate synthetase 1, 40/46kDa [Source:HGNC Symbol;Acc:HGNC:8086]
ENSSSCT00000011053	0.25	0.001	-7.96578	PI4KA	kinase, catalytic, alpha [Source:HGNC Symbol;Acc:HGNC:8983]
ENSSSCT00000011308	5.313333	16.15333	1.604143	-	-
ENSSSCT00000011527	63.87333	173.52	1.441816	GOT1	Aspartate aminotransferase, cytoplasmic [Source:UniProtKB/Swiss- Prot;Acc:P00503]
ENSSSCT00000011662	0.84	0.013333	-5.97728	HSPA12A	heat shock 70kDa protein 12A [Source:HGNC Symbol;Acc:HGNC:19022]
ENSSSCT00000011679	4.763333	0.886667	-2.42551	NANOS1	nanos homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:HGNC:23044]
ENSSSCT00000012400	378.2933	994.8167	1.394925	MYL3	-
ENSSSCT00000012465	0.001	0.646667	9.336878	-	-
ENSSSCT00000013322	19.83	0.001	-14.2754	-	-
ENSSSCT00000013323	5.7	0.086667	-6.03934	-	-
ENSSSCT00000013502	0.52	3.57	2.779341	ALAS2	5'-aminolevulinate synthase 2 [Source:HGNC Symbol;Acc:HGNC:397]
ENSSSCT00000013571	1.623333	12.83	2.98249	PHKA1	phosphorylase kinase, alpha 1 (muscle) [Source:HGNC Symbol;Acc:HGNC:8925]
ENSSSCT00000014241	4.983333	14.59333	1.550126	ESRRA	estrogen-related receptor alpha [Source:HGNC Symbol;Acc:HGNC:3471]
ENSSSCT00000014538	0.001	2.046667	10.99906	HIPK3	homeodomain interacting protein kinase 3 [Source:HGNC Symbol;Acc:HGNC:4915]
ENSSSCT00000014800	0.001	1.086667	10.08569	-	-
ENSSSCT00000015061	94.59333	17.26	-2.45431	-	-
ENSSSCT00000015384	0.23	7.33	4.994107	ANKDD1B	ankyrin repeat and death domain containing 1B [Source:HGNC Symbol;Acc:HGNC:32525]

ENSSSCT00000015432	355.4867	841.37	1.242945	CKMT2	-
ENSSSCT00000015449	11.43667	29.9	1.386479	-	Cytochrome c oxidase subunit 7C, mitochondrial [Source:UniProtKB/Swiss-Prot;Acc:Q1W0Y2]
ENSSSCT00000015576	53.64667	19.52333	-1.45829	SLC12A2	solute carrier family 12 (sodium/potassium/chloride transporter), member 2 [Source:HGNC Symbol;Acc:HGNC:10911]
ENSSSCT00000015660	7.37	0.846667	-3.1218	EGR1	early growth response 1 [Source:HGNC Symbol;Acc:HGNC:3238]
ENSSSCT00000015663	1.56	0.01	-7.2854	EGR1	early growth response 1 [Source:HGNC Symbol;Acc:HGNC:3238]
ENSSSCT00000015929	0.001	1.066667	10.05889	-	-
ENSSSCT00000016196	1.433333	0.001	-10.4852	-	-
ENSSSCT00000016469	80.38	3.313333	-4.60048	RPS25	ribosomal protein S25 [Source:HGNC Symbol;Acc:HGNC:10413]
ENSSSCT00000016707	421.04	7.9	-5.73596	PDK4	-
ENSSSCT00000016780	15.67333	37.79667	1.269947	CD36	-
ENSSSCT00000016961	13.36333	44.67333	1.741134	IVNS1ABP	influenza virus NS1A binding protein [Source:HGNC Symbol;Acc:HGNC:16951]
ENSSSCT00000017016	0.786667	0.001	-9.61961	CD34	CD34 molecule [Source:HGNC Symbol;Acc:HGNC:1662]
ENSSSCT00000017270	1.006667	0.001	-9.97537	SAP130	Sin3A-associated protein, 130kDa [Source:HGNC Symbol;Acc:HGNC:29813]
ENSSSCT00000017282	2.286667	0.086667	-4.72163	NR4A2	nuclear receptor subfamily 4, group A, member 2 [Source:HGNC Symbol;Acc:HGNC:7981]
ENSSSCT00000017392	66.26667	167.0867	1.334241	ATP5G3	-
ENSSSCT00000017523	33.59	10.87	-1.62768	-	-
ENSSSCT00000018009	43.86	147.4	1.748759	AKR1B1	-
ENSSSCT00000018236	9	2.916667	-1.6256	AEBP1	AE binding protein 1 [Source:HGNC Symbol;Acc:HGNC:303]

ENSSSCT00000018381	56.09667	129.4033	1.205888	NNT	nicotinamide nucleotide transhydrogenase [Source:HGNC Symbol;Acc:HGNC:7863]
ENSSSCT00000018501	130.4567	25.56667	-2.35123	DUSP1	- ribosomal protein L38 [Source:HGNC Symbol;Acc:HGNC:10349]
ENSSSCT00000018768	38.74	0.001	-15.2415	RPL38	-
ENSSSCT00000019062	69.26	22.72	-1.60806	-	- ATP synthase, H+ transporting, mitochondrial Fo complex, subunit C1 (subunit 9) [Source:HGNC Symbol;Acc:HGNC:841]
ENSSSCT00000019098	219.1333	526.94	1.26583	ATP5G1	-
ENSSSCT00000019601	6.24	1.123333	-2.47376	-	- NADH dehydrogenase subunit 4L (mitochondrion) [Source:RefSeq peptide;Acc:NP_008642]
ENSSSCT00000019681	360.45	987.2767	1.453655	ND4L	NADH-ubiquinone oxidoreductase chain 6 [Source:UniProtKB/Swiss- Prot;Acc:O79882]
ENSSSCT00000019687	448.2767	1029.107	1.198931	ND6	-
ENSSSCT00000022502	0.001	0.46	8.84549	-	- NADH dehydrogenase (ubiquinone) Fe-S protein 7, 20kDa (NADH-coenzyme Q reductase) [Source:HGNC Symbol;Acc:HGNC:7714]
ENSSSCT00000023318	33.22	108.5567	1.708324	NDUFS7	-
ENSSSCT00000023380	20.19333	46.93	1.216631	-	-
ENSSSCT00000023398	8.566667	0.08	-6.74259	-	-
ENSSSCT00000023699	0.001	2.043333	10.99671	ACO1	aconitase 1, soluble [Source:HGNC Symbol;Acc:HGNC:117]
ENSSSCT00000024200	1.493333	11.39333	2.931582	-	-
ENSSSCT00000024553	8.316667	0.001	-13.0218	-	-
ENSSSCT00000024741	0.536667	0.001	-9.06788	PPIL4	peptidylprolyl isomerase (cyclophilin)-like 4 [Source:HGNC Symbol;Acc:HGNC:15702]
ENSSSCT00000024980	30.77333	0.01	-11.5875	-	-
ENSSSCT00000025191	0.001	3.6	11.81378	MICU2	mitochondrial calcium uptake 2 [Source:HGNC Symbol;Acc:HGNC:31830]

ENSSSCT00000025648	0.493333	0.001	-8.94642	ARAP1	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 1 [Source:HGNC Symbol;Acc:HGNC:16925]
ENSSSCT00000026377	6.593333	1.346667	-2.29162	RASGEF1B	ras-GEF domain-containing family member 1B [Source:RefSeq peptide;Acc:NP_001182296]
ENSSSCT00000026451	14.86333	55.65667	1.904797	PPP1R3B	protein phosphatase 1, regulatory subunit 3B [Source:HGNC Symbol;Acc:HGNC:14942]
ENSSSCT00000026880	0.001	26.21	14.67783	-	-
ENSSSCT00000027232	188.0133	830.4833	2.143116	-	-
ENSSSCT00000027235	0.74	0.001	-9.53138	RFFL	ring finger and FYVE-like domain containing E3 ubiquitin protein ligase [Source:HGNC Symbol;Acc:HGNC:24821]
ENSSSCT00000027298	12.68	4.206667	-1.59181	-	-
ENSSSCT00000027462	0.383333	0.006667	-5.84549	WDR19	WD repeat domain 19 [Source:HGNC Symbol;Acc:HGNC:18340]
ENSSSCT00000027771	121.9833	308.7767	1.33988	PDHA1	pyruvate dehydrogenase (lipoamide) alpha 1 [Source:HGNC Symbol;Acc:HGNC:8806]
ENSSSCT00000027869	6.656667	1.436667	-2.21207	-	-
ENSSSCT00000028216	224.77	64.15667	-1.80878	-	-
ENSSSCT00000028237	45.18333	110.9167	1.295614	-	-
ENSSSCT00000028542	6.95	1.233333	-2.49445	-	-
ENSSSCT00000028661	102.8833	17.34667	-2.56828	BTG2	-
ENSSSCT00000028884	0.193333	0.001	-7.59495	DDX3Y	DEAD (Asp-Glu-Ala-Asp) box helicase 3, Y-linked [Source:HGNC Symbol;Acc:HGNC:2699]
ENSSSCT00000028975	110.8933	20.70667	-2.42101	SHISA2	shisa family member 2 [Source:HGNC Symbol;Acc:HGNC:20366]
ENSSSCT00000029040	10.93667	0.001	-13.4169	-	-
ENSSSCT00000029270	4.463333	12	1.426841	IFI44L	interferon-induced protein 44-like [Source:HGNC Symbol;Acc:HGNC:17817]

ENSSSCT00000029625	0.001	3.1	11.59805	USP9Y	ubiquitin specific peptidase 9, Y-linked [Source:HGNC Symbol;Acc:HGNC:12633]
ENSSSCT00000029905	0.001	1.39	10.44087	FKBP9	FK506 binding protein 9, 63 kDa [Source:HGNC Symbol;Acc:HGNC:3725]
ENSSSCT00000030563	0.056667	3.093333	5.770518	-	-
ENSSSCT00000030802	0.743333	0.001	-9.53787	-	-
ENSSSCT00000030852	2.4	0.001	-11.2288	-	-
ENSSSCT00000030903	5.53	17.15333	1.633138	-	-
ENSSSCT00000030906	0.12	0.001	-6.90689	KIAA2026	KIAA2026 [Source:HGNC Symbol;Acc:HGNC:23378]
ENSSSCT00000031037	0.001	0.41	8.67948	ETV6	ets variant 6 [Source:HGNC Symbol;Acc:HGNC:3495]
ENSSSCT00000031092	0.001	0.92	9.84549	-	-
ENSSSCT00000031122	0.001	0.96	9.906891	P4HA2	prolyl 4-hydroxylase, alpha polypeptide II [Source:HGNC Symbol;Acc:HGNC:8547]
ENSSSCT00000031202	6.266667	0.001	-12.6135	-	-
ENSSSCT00000031428	1.976667	6.473333	1.711439	SLC16A3	solute carrier family 16 (monocarboxylate transporter), member 3 [Source:HGNC Symbol;Acc:HGNC:10924]
ENSSSCT00000031509	3.393333	1.16	-1.54858	-	-
ENSSSCT00000031950	5.616667	0.38	-3.88564	ADAMTS1	-
ENSSSCT00000031972	2.696667	33.12667	3.618744	DEFB1	-
ENSSSCT00000032277	0.246667	0.001	-7.94642	UBR1	ubiquitin protein ligase E3 component n-recognin 1 [Source:HGNC Symbol;Acc:HGNC:16808]
ENSSSCT00000032593	11.29667	69.40333	2.619108	CD36	-
ENSSSCT00000032649	2.423333	0.443333	-2.45053	KLF4	Kruppel-like factor 4 (gut) [Source:HGNC Symbol;Acc:HGNC:6348]
ENSSSCT00000032662	0.001	3.06	11.57932	LIFR	leukemia inhibitory factor receptor alpha [Source:HGNC Symbol;Acc:HGNC:6597]
ENSSSCT00000033729	0.816667	0.001	-9.6736	TLR2	toll-like receptor 2 [Source:HGNC Symbol;Acc:HGNC:11848]



ENSSSCT00000033745	0.433333	3.166667	2.869416	MAOB	monoamine oxidase B [Source:HGNC Symbol;Acc:HGNC:6834]
ENSSSCT00000034484	0.826667	0.001	-9.69116	ACVR2B	activin A receptor, type IIB [Source:HGNC Symbol;Acc:HGNC:174]
ENSSSCT00000034640	9.07	1.403333	-2.69224	CXCL2	C-X-C motif chemokine 2 precursor [Source:RefSeq peptide;Acc:NP_001001861]
ENSSSCT00000034919	0.001	0.32	8.321928	KDM6A	lysine (K)-specific demethylase 6A [Source:HGNC Symbol;Acc:HGNC:12637]
ENSSSCT00000035032	1.276667	0.001	-10.3182	SMS	spermine synthase [Source:HGNC Symbol;Acc:HGNC:11123]
ENSSSCT00000035069	0.536667	37.23333	6.116425	MYH6	-
ENSSSCT00000035292	1.81	0.001	-10.8218	SCD	-
ENSSSCT00000035485	20.63333	0.683333	-4.91624	ATF3	activating transcription factor 3 [Source:HGNC Symbol;Acc:HGNC:785]
ENSSSCT00000035749	2.06	0.001	-11.0084	FADD	protein FADD [Source:RefSeq peptide;Acc:NP_001026967]
ENSSSCT00000035876	123.0433	9.196667	-3.74191	PVALB	parvalbumin [Source:HGNC Symbol;Acc:HGNC:9704]
ENSSSCT00000035973	1.206667	0.001	-10.2368	BAG6	BCL2-associated athanogene 6 [Source:HGNC Symbol;Acc:HGNC:13919]
ENSSSCT00000035982	2.516667	0.1	-4.65344	CH242- 138G12.1	-
ENSSSCT00000036290	73.12	23.34667	-1.64705	JUN	-
ENSSSCT00000036352	0.843333	37.77333	5.485121	MYH6	-
ENSSSCT00000036373	4.123333	0.06	-6.1027	TSPAN6	tetraspanin-6 [Source:RefSeq peptide;Acc:NP_001230990]
ENSSSCT00000036434	25.99333	58.51	1.170542	PDHA1	pyruvate dehydrogenase (lipoamide) alpha 1 [Source:HGNC Symbol;Acc:HGNC:8806]
ENSSSCT00000036440	0.001	1.2	10.22882	ABCB7	ATP-binding cassette, sub- family B (MDR/TAP), member 7 [Source:HGNC Symbol;Acc:HGNC:48]

ENSSSCT00000036536 121.4167 455.2533 1.906703 HBB -

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**Table S2 The corresponding gene list of GO analysis**

Ontology	Class	number _of_D6- vs- M6_up	number _of_D6 -vs- M6_down	genes_of_D6-vs-M6_up	genes_of_D6-vs-M6_down
Biological Processes	metabolic process	62	74	ENSSSCT0000000934/	ENSSSCT00000002510/ENS
				ENSSSCT0000001927/	SSCT00000006733/ENSSSC
				ENSSSCT0000002808/	T00000008947/ENSSSCT000
				ENSSSCT0000006226/	00011053/ENSSSCT0000001
				ENSSSCT0000006699/	3322/ENSSSCT00000015061/
				ENSSSCT0000007534/	ENSSSCT00000017282/ENS
				ENSSSCT0000009163/	SSCT00000017523/ENSSSC
				ENSSSCT0000009164/	T00000018501/ENSSSCT000
				ENSSSCT00000011308/	00018768/ENSSSCT0000001
				ENSSSCT00000011527/	9062/ENSSSCT00000024741/
				ENSSSCT00000013502/	ENSSSCT00000024980/ENS
				ENSSSCT00000013571/	SSCT00000027462/ENSSSC
				ENSSSCT00000014241/	T00000028216/ENSSSCT000
				ENSSSCT00000014538/	00028884/ENSSSCT0000003
				ENSSSCT00000017392/	1202/ENSSSCT00000032277/
				ENSSSCT00000018381/	ENSSSCT00000034484/ENS
				ENSSSCT00000019098/	SSCT00000035032/ENSSSC
				ENSSSCT00000019681/	T00000035292/ENSSSCT000
				ENSSSCT00000026451/	00035973/ENSSSCT0000003
				ENSSSCT00000027771/	5982/ENSSSCT00000036290/
				ENSSSCT00000029625/	TCONS_00004796/TCONS_0
				ENSSSCT00000029905/	0005241/TCONS_00006314/
				ENSSSCT00000031122/	TCONS_00006316/TCONS_0
				ENSSSCT00000034919/	0008348/TCONS_00011158/
				ENSSSCT00000036434/	TCONS_00011474/TCONS_0
				TCONS_00001139/TCO	0012424/TCONS_00013318/
				NS_00004794/TCONS_	TCONS_00013451/TCONS_0
				00004931/TCONS_0000	0013452/TCONS_00015685/
				7403/TCONS_00013396	TCONS_00016536/TCONS_0
				/TCONS_00014448/TC	0017991/TCONS_00020520/
				ONS_00016859/TCONS	TCONS_00022007/TCONS_0
				_00018210/TCONS_000	0028230/TCONS_00029348/
20459/TCONS_0002435	TCONS_00032031/TCONS_0				
5/TCONS_00028863/TC	0035093/TCONS_00038058/				
ONS_00032517/TCONS	TCONS_00041695/TCONS_0				
_00033609/TCONS_000	0042856/TCONS_00045347/				

				36842/TCONS_0004264	TCONS_00045349/TCONS_0
				2/TCONS_00045665/TC	0045630/TCONS_00048384/
				ONS_00046597/TCONS	TCONS_00049436/TCONS_0
				_00049007/TCONS_000	0052677/TCONS_00052953/
				51555/TCONS_0005289	TCONS_00068370/TCONS_0
				4/TCONS_00055773/TC	0076154/TCONS_00076744/
				ONS_00059949/TCONS	TCONS_00078029/TCONS_0
				_00064907/TCONS_000	0081205/TCONS_00083246/
				65482/TCONS_0006773	TCONS_00084390/TCONS_0
				3/TCONS_00075802/TC	0084498/TCONS_00085534/
				ONS_00076786/TCONS	TCONS_00085544/TCONS_0
				_00080151/TCONS_000	0092241/TCONS_00094370/
				81239/TCONS_0008369	TCONS_00098419/TCONS_0
				4/TCONS_00087175/TC	0100494/TCONS_00100510/
				ONS_00088728/TCONS	TCONS_00100513/TCONS_0
				_00090200/TCONS_000	0100515/TCONS_00100528/
				90930/TCONS_0009637	TCONS_00100529/TCONS_0
				6/TCONS_00098418/TC	0100533
				ONS_00099248	
Biolo	rhythmi				TCONS_00016536/TCONS_0
gical	c	1	4	TCONS_00095452	0020520/TCONS_00048384/
Proce	process				TCONS_00085534
ss					ENSSSCT00000010229/ENS
					SSCT00000018501/ENSSSC
				ENSSSCT00000003939/	T00000027462/ENSSSCT000
				ENSSSCT00000027232/	00035973/TCONS_00003027/
				ENSSSCT00000031037/	TCONS_00004822/TCONS_0
				TCONS_00004931/TCO	0006314/TCONS_00006316/
				NS_00010673/TCONS_	TCONS_00006377/TCONS_0
				00012908/TCONS_0001	0007428/TCONS_00008709/
				6637/TCONS_00020459	TCONS_00011158/TCONS_0
				/TCONS_00033609/TC	0016869/TCONS_00016870/
		20	40	ONS_00042642/TCONS	TCONS_00017991/TCONS_0
				_00049007/TCONS_000	0024980/TCONS_00024981/
				50395/TCONS_0005131	TCONS_00028230/TCONS_0
				1/TCONS_00055773/TC	0031135/TCONS_00031548/
				ONS_00057499/TCONS	TCONS_00035093/TCONS_0
				_00072374/TCONS_000	0035601/TCONS_00038058/
				90200/TCONS_0009093	TCONS_00045630/TCONS_0
				0/TCONS_00095452/TC	0045691/TCONS_00045692/
				ONS_00096376	TCONS_00049436/TCONS_0
					0050770/TCONS_00052642/
					TCONS_00053886/TCONS_0
Biolo	develop				
gical	mental				
Proce	process				
ss					

				0054717/TCONS_00058416/ TCONS_00081205/TCONS_0 0084498/TCONS_00085534/ TCONS_00085544/TCONS_0 0092241/TCONS_00096230/ TCONS_00100528/TCONS_0 0100529 ENSSSCT00000005271/ENS SSCT00000010229/ENSSSC T00000013322/ENSSSCT000 00018768/ENSSSCT0000002 7462/ENSSSCT00000028216/ ENSSSCT00000030802/ENS SSCT00000031202/ENSSSC T00000035973/TCONS_0000 6377/TCONS_00008348/TCO NS_00008709/TCONS_00011 158/TCONS_00016869/TCO NS_00016870/TCONS_00020 520/TCONS_00022468/TCO NS_00031548/TCONS_00035 410/TCONS_00035601/TCO NS_00038058/TCONS_00041 695/TCONS_00045630/TCO NS_00049436/TCONS_00052 677/TCONS_00052953/TCO NS_00072603/TCONS_00073 850/TCONS_00077645/TCO NS_00081205/TCONS_00084 552/TCONS_00085534/TCO NS_00085544/TCONS_00090 841/TCONS_00096230/TCO NS_00100501/TCONS_00100 528/TCONS_00100529
Biolo gical Proce ss	cellular compo nent organiz ation or biogene sis	25	38	ENSSSCT00000002808/ ENSSSCT00000011308/ ENSSSCT00000034919/ TCONS_00000968/TCO NS_00004931/TCONS_ 00009137/TCONS_0001 6637/TCONS_00025216 /TCONS_00028863/TC ONS_00032517/TCONS _00033609/TCONS_000 42642/TCONS_0004659 7/TCONS_00049538/TC ONS_00050395/TCONS _00051311/TCONS_000 51555/TCONS_0005577 3/TCONS_00062759/TC ONS_00067733/TCONS _00087195/TCONS_000 90200/TCONS_0009438 3/TCONS_00095452/TC ONS_00096376
Biolo gical Proce ss	hormon e secretio n	0	1	TCONS_00048384
Biolo gical Proce ss	reprodu ctive process	3	5	TCONS_00033609/TCO NS_00057499/TCONS_ 00080151
Biolo gical	multice llular	18	37	TCONS_00004931/TCO NS_00010673/TCONS_

Proce organis  
ss mal  
process

00012908/TCONS\_0002 T00000035973/TCONS\_0000  
0459/TCONS\_00028503 3027/TCONS\_00004822/TCO  
/TCONS\_00029075/TC NS\_00006314/TCONS\_00006  
ONS\_00032517/TCONS 316/TCONS\_00007428/TCO  
\_00033609/TCONS\_000 NS\_00008709/TCONS\_00011  
42642/TCONS\_0004654 158/TCONS\_00016869/TCO  
1/TCONS\_00049007/TC NS\_00016870/TCONS\_00017  
ONS\_00051311/TCONS 991/TCONS\_00024980/TCO  
\_00057499/TCONS\_000 NS\_00024981/TCONS\_00028  
74295/TCONS\_0009020 230/TCONS\_00031548/TCO  
0/TCONS\_00090930/TC NS\_00035093/TCONS\_00035  
ONS\_00095452/TCONS 601/TCONS\_00038058/TCO  
\_00096376 NS\_00041695/TCONS\_00045  
630/TCONS\_00048384/TCO  
NS\_00049436/TCONS\_00050  
770/TCONS\_00052642/TCO  
NS\_00053886/TCONS\_00058  
416/TCONS\_00078029/TCO  
NS\_00081205/TCONS\_00084  
498/TCONS\_00085534/TCO  
NS\_00085544/TCONS\_00092  
241/TCONS\_00096230/TCO  
NS\_00100528/TCONS\_00100

529

ENSSSCT00000009859/ ENSSSCT00000002510/ENS  
ENSSSCT00000014241/ SSCT00000007604/ENSSSC  
ENSSSCT00000015384/ T00000008247/ENSSSCT000  
ENSSSCT00000018381/ 00009813/ENSSSCT0000001  
ENSSSCT00000023699/ 1053/ENSSSCT00000015576/  
ENSSSCT00000028237/ ENSSSCT00000017282/ENS  
ENSSSCT00000032662/ SSCT00000025648/ENSSSC  
ENSSSCT00000036440/ T00000026377/ENSSSCT000  
TCONS\_00000968/TCO 00033729/ENSSSCT0000003  
NS\_00001840/TCONS\_ 4484/ENSSSCT00000034640/  
00003237/TCONS\_0000 ENSSSCT00000035749/ENS  
4931/TCONS\_00009137 SSCT00000035973/ENSSSC  
/TCONS\_00010673/TC T00000035982/ENSSSCT000  
ONS\_00012908/TCONS 00036373/TCONS\_00003027/  
\_00018210/TCONS\_000 TCONS\_00003539/TCONS\_0  
18343/TCONS\_0002045 0004822/TCONS\_00007428/  
9/TCONS\_00021033/TC TCONS\_00008348/TCONS\_0  
ONS\_00029075/TCONS 0008709/TCONS\_00011158/  
\_00032517/TCONS\_000 TCONS\_00015685/TCONS\_0  
33609/TCONS\_0003393 0016536/TCONS\_00017991/

Biolo biologi  
gical cal  
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ss on

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77

7/TCONS\_00046541/TC TCONS\_00020520/TCONS\_0  
ONS\_00046597/TCONS 0021034/TCONS\_00022468/  
\_00049007/TCONS\_000 TCONS\_00024980/TCONS\_0  
49538/TCONS\_0004967 0024981/TCONS\_00025388/  
2/TCONS\_00051311/TC TCONS\_00028230/TCONS\_0  
ONS\_00055773/TCONS 0028709/TCONS\_00029348/  
\_00057499/TCONS\_000 TCONS\_00031135/TCONS\_0  
59949/TCONS\_0006314 0031328/TCONS\_00031548/  
7/TCONS\_00067733/TC TCONS\_00032179/TCONS\_0  
ONS\_00074295/TCONS 0035093/TCONS\_00035410/  
\_00076786/TCONS\_000 TCONS\_00038058/TCONS\_0  
80151/TCONS\_0008426 0041695/TCONS\_00042856/  
6/TCONS\_00087175/TC TCONS\_00045347/TCONS\_0  
ONS\_00091479/TCONS 0045349/TCONS\_00045630/  
\_00094383/TCONS\_000 TCONS\_00048384/TCONS\_0  
95452/TCONS\_0009637 0049436/TCONS\_00049673/  
6/TCONS\_00097159/TC TCONS\_00052642/TCONS\_0  
ONS\_00099248 0052677/TCONS\_00052953/  
TCONS\_00054717/TCONS\_0  
0058416/TCONS\_00065835/  
TCONS\_00068370/TCONS\_0  
0072603/TCONS\_00073850/  
TCONS\_00076744/TCONS\_0  
0077645/TCONS\_00081205/  
TCONS\_00083743/TCONS\_0  
0084498/TCONS\_00084552/  
TCONS\_00085534/TCONS\_0  
0085544/TCONS\_00086748/  
TCONS\_00090841/TCONS\_0  
0092241/TCONS\_00094370/  
TCONS\_00096230/TCONS\_0  
0100501/TCONS\_00100513/  
TCONS\_00100515/TCONS\_0  
0100528/TCONS\_00100529

Biological Processes	growth	2	3	TCONS_00033609/TCO NS_00096376	TCONS_00050770/TCONS_0 0100528/TCONS_00100529
Biological Processes	cellular process	79	118	ENSSSCT00000000934/ ENSSSCT00000002808/ ENSSSCT00000006699/ ENSSSCT00000007534/ ENSSSCT00000009859/ ENSSSCT00000011308/	ENSSSCT00000002510/ENS SSCT00000005271/ENSSSC T00000007604/ENSSSCT000 00008247/ENSSSCT0000000 8947/ENSSSCT00000009813/ ENSSSCT00000010229/ENS

ENSSSCT00000011527/ SSCT00000011053/ENSSSC  
ENSSSCT00000013502/ T00000013322/ENSSSCT000  
ENSSSCT00000013571/ 00015061/ENSSSCT0000001  
ENSSSCT00000014241/ 5576/ENSSSCT00000017282/  
ENSSSCT00000014538/ ENSSSCT00000017523/ENS  
ENSSSCT00000015384/ SSCT00000018501/ENSSSC  
ENSSSCT00000015449/ T00000018768/ENSSSCT000  
ENSSSCT00000017392/ 00019062/ENSSSCT0000002  
ENSSSCT00000018381/ 4741/ENSSSCT00000024980/  
ENSSSCT00000019098/ ENSSSCT00000025648/ENS  
ENSSSCT00000019681/ SSCT00000026377/ENSSSC  
ENSSSCT00000026451/ T00000027462/ENSSSCT000  
ENSSSCT00000027771/ 00027869/ENSSSCT0000002  
ENSSSCT00000029625/ 8216/ENSSSCT00000028884/  
ENSSSCT00000029905/ ENSSSCT00000031202/ENS  
ENSSSCT00000031037/ SSCT00000032277/ENSSSC  
ENSSSCT00000031122/ T00000033729/ENSSSCT000  
ENSSSCT00000031428/ 00034484/ENSSSCT0000003  
ENSSSCT00000032662/ 4640/ENSSSCT00000035032/  
ENSSSCT00000034919/ ENSSSCT00000035749/ENS  
ENSSSCT00000036434/ SSCT00000035973/ENSSSC  
ENSSSCT00000036440/ T00000035982/ENSSSCT000  
TCONS\_00000968/TCO 00036290/ENSSSCT0000003  
NS\_00001139/TCONS\_ 6373/TCONS\_00003027/TCO  
00001840/TCONS\_0000 NS\_00004594/TCONS\_00004  
3237/TCONS\_00004794 796/TCONS\_00004822/TCO  
/TCONS\_00004931/TC NS\_00005241/TCONS\_00006  
ONS\_00009137/TCONS 314/TCONS\_00006316/TCO  
\_00012908/TCONS\_000 NS\_00006377/TCONS\_00008  
13396/TCONS\_0001663 348/TCONS\_00008709/TCO  
7/TCONS\_00016859/TC NS\_00011158/TCONS\_00012  
ONS\_00018210/TCONS 424/TCONS\_00013318/TCO  
\_00020459/TCONS\_000 NS\_00013451/TCONS\_00013  
24355/TCONS\_0002521 452/TCONS\_00014951/TCO  
6/TCONS\_00028863/TC NS\_00015685/TCONS\_00016  
ONS\_00032517/TCONS 536/TCONS\_00016869/TCO  
\_00033609/TCONS\_000 NS\_00016870/TCONS\_00017  
33937/TCONS\_0003684 991/TCONS\_00020222/TCO  
2/TCONS\_00042642/TC NS\_00020520/TCONS\_00022  
ONS\_00045665/TCONS 007/TCONS\_00022468/TCO  
\_00046597/TCONS\_000 NS\_00024980/TCONS\_00024  
49007/TCONS\_0004953 981/TCONS\_00025388/TCO  
8/TCONS\_00050395/TC NS\_00028230/TCONS\_00029  
ONS\_00051311/TCONS 348/TCONS\_00031328/TCO



\_00055773/TCONS\_000 NS\_00031548/TCONS\_00032  
 57499/TCONS\_0005994 031/TCONS\_00035093/TCO  
 9/TCONS\_00062759/TC NS\_00035410/TCONS\_00035  
 ONS\_00063147/TCONS 601/TCONS\_00036864/TCO  
 \_00064907/TCONS\_000 NS\_00038058/TCONS\_00041  
 65482/TCONS\_0006773 695/TCONS\_00042856/TCO  
 3/TCONS\_00074295/TC NS\_00045347/TCONS\_00045  
 ONS\_00075802/TCONS 349/TCONS\_00045630/TCO  
 \_00076786/TCONS\_000 NS\_00045691/TCONS\_00045  
 80151/TCONS\_0008123 692/TCONS\_00048384/TCO  
 9/TCONS\_00083694/TC NS\_00049436/TCONS\_00049  
 ONS\_00087175/TCONS 673/TCONS\_00050770/TCO  
 \_00087195/TCONS\_000 NS\_00052642/TCONS\_00052  
 88728/TCONS\_0009020 677/TCONS\_00052953/TCO  
 0/TCONS\_00090930/TC NS\_00053886/TCONS\_00054  
 ONS\_00094383/TCONS 717/TCONS\_00058416/TCO  
 \_00095452/TCONS\_000 NS\_00060620/TCONS\_00068  
 96376/TCONS\_0009841 370/TCONS\_00072603/TCO  
 8/TCONS\_00099248 NS\_00073850/TCONS\_00076  
 744/TCONS\_00077645/TCO  
 NS\_00078029/TCONS\_00081  
 205/TCONS\_00083743/TCO  
 NS\_00084390/TCONS\_00084  
 498/TCONS\_00084552/TCO  
 NS\_00085534/TCONS\_00085  
 544/TCONS\_00086748/TCO  
 NS\_00090841/TCONS\_00092  
 241/TCONS\_00094370/TCO  
 NS\_00096230/TCONS\_00098  
 419/TCONS\_00100494/TCO  
 NS\_00100501/TCONS\_00100  
 510/TCONS\_00100513/TCO  
 NS\_00100515/TCONS\_00100  
 528/TCONS\_00100529/TCO  
 NS\_00100533

Biolo	behavior	3	2	TCONS_00029075/TCO	TCONS_00038058/TCONS_0
Proce	r			NS_00090930/TCONS_	0041695
ss				00097159	
Biolo	single-			ENSSSCT00000000934/	ENSSSCT00000002510/ENS
gical	organis			ENSSSCT00000001927/	SSCT00000006733/ENSSSC
Proce	m	65	94	ENSSSCT00000009163/	T00000007604/ENSSSCT000
ss	process			ENSSSCT00000009164/	00008247/ENSSSCT0000000
				ENSSSCT00000009859/	9813/ENSSSCT00000010229/

ENSSSCT00000011308/ ENSSSCT00000011053/ENS  
ENSSSCT00000011527/ SSCT00000015576/ENSSSC  
ENSSSCT00000014241/ T00000017282/ENSSSCT000  
ENSSSCT00000015384/ 00018501/ENSSSCT0000002  
ENSSSCT00000015449/ 5648/ENSSSCT00000026377/  
ENSSSCT00000017392/ ENSSSCT00000027462/ENS  
ENSSSCT00000018381/ SSCT00000027869/ENSSSC  
ENSSSCT00000019098/ T00000028884/ENSSSCT000  
ENSSSCT00000019681/ 00033729/ENSSSCT0000003  
ENSSSCT00000027771/ 4484/ENSSSCT00000034640/  
ENSSSCT00000029625/ ENSSSCT00000035292/ENS  
ENSSSCT00000031037/ SSCT00000035749/ENSSSC  
ENSSSCT00000031428/ T00000035973/ENSSSCT000  
ENSSSCT00000032662/ 00035982/ENSSSCT0000003  
ENSSSCT00000036434/ 6373/TCONS\_00003027/TCO  
ENSSSCT00000036440/ NS\_00003539/TCONS\_00004  
TCONS\_00001840/TCO 594/TCONS\_00004822/TCO  
NS\_00003237/TCONS\_ NS\_00006314/TCONS\_00006  
00004931/TCONS\_0000 316/TCONS\_00006377/TCO  
9137/TCONS\_00010673 NS\_00007428/TCONS\_00008  
/TCONS\_00012908/TC 348/TCONS\_00008709/TCO  
ONS\_00014448/TCONS NS\_00011158/TCONS\_00012  
\_00016637/TCONS\_000 424/TCONS\_00014951/TCO  
18210/TCONS\_0002045 NS\_00016869/TCONS\_00016  
9/TCONS\_00025216/TC 870/TCONS\_00017991/TCO  
ONS\_00028503/TCONS NS\_00020222/TCONS\_00020  
\_00028863/TCONS\_000 520/TCONS\_00022468/TCO  
29075/TCONS\_0003251 NS\_00024980/TCONS\_00024  
7/TCONS\_00033609/TC 981/TCONS\_00025388/TCO  
ONS\_00033937/TCONS NS\_00028230/TCONS\_00031  
\_00036842/TCONS\_000 135/TCONS\_00031328/TCO  
42642/TCONS\_0004654 NS\_00031548/TCONS\_00035  
1/TCONS\_00049007/TC 093/TCONS\_00035410/TCO  
ONS\_00050395/TCONS NS\_00035601/TCONS\_00036  
\_00051311/TCONS\_000 864/TCONS\_00038058/TCO  
51555/TCONS\_0005289 NS\_00041695/TCONS\_00042  
4/TCONS\_00055773/TC 856/TCONS\_00045347/TCO  
ONS\_00057499/TCONS NS\_00045349/TCONS\_00045  
\_00059949/TCONS\_000 630/TCONS\_00045691/TCO  
62759/TCONS\_0006314 NS\_00045692/TCONS\_00048  
7/TCONS\_00067733/TC 384/TCONS\_00049436/TCO  
ONS\_00072374/TCONS NS\_00049673/TCONS\_00050  
\_00074295/TCONS\_000 770/TCONS\_00052642/TCO  
80151/TCONS\_0008123 NS\_00052677/TCONS\_00052

				9/TCONS_00083694/TCONS_00087195/TCONS_00090200/TCONS_00090930/TCONS_00091479/TCONS_00094383/TCONS_00095452/TCONS_00096376/TCONS_00097159	953/TCONS_00053886/TCONS_00054717/TCONS_00058416/TCONS_00060620/TCONS_00065835/TCONS_0006789/TCONS_00068370/TCONS_00072603/TCONS_00073850/TCONS_00076154/TCONS_00077645/TCONS_00078029/TCONS_00081205/TCONS_00083743/TCONS_00084498/TCONS_00085534/TCONS_00085544/TCONS_00086748/TCONS_00090841/TCONS_00092241/TCONS_00094370/TCONS_00096230/TCONS_00100501/TCONS_00100510/TCONS_00100528/TCONS_00100529
Biological Processes	immune system process	9	10	ENSSSCT00000001329/ENSSSCT00000009461/ENSSSCT00000009859/ENSSSCT00000010832/ENSSSCT00000014800/TCONS_00001840/TCONS_00033937/TCONS_00049007/TCONS_00063147	ENSSSCT00000009813/ENSSSCT00000033729/ENSSSCT00000034640/ENSSSCT0000035973/TCONS_00004822/TCONS_00007428/TCONS_00031548/TCONS_00045630/TCONS_00085534/TCONS_00085544
Biological Processes	locomotion	2	11	ENSSSCT00000029625/TCONS_00051311	ENSSSCT00000009813/ENSSSCT00000034640/TCONS_00014951/TCONS_00031548/TCONS_00038058/TCONS_00052953/TCONS_00054717/TCONS_00085534/TCONS_00085544/TCONS_00100528/TCONS_00100529
Biological Processes	localization	27	33	ENSSSCT00000003939/ENSSSCT00000008741/ENSSSCT00000011308/ENSSSCT00000015449/ENSSSCT00000017392/ENSSSCT00000018381/ENSSSCT00000019098/ENSSSCT00000027232/ENSSSCT00000028237/	ENSSSCT00000009813/ENSSSCT00000015576/ENSSSCT00000027462/ENSSSCT00000030027869/ENSSSCT00000030802/ENSSSCT00000034640/ENSSSCT00000035973/TCONS_00003539/TCONS_00004822/TCONS_00008348/TCONS_00008709/TCONS_00011

				ENSSSCT00000029625/	158/TCONS_00014951/TCO
				ENSSSCT00000031428/	NS_00015685/TCONS_00020
				ENSSSCT00000036440/	222/TCONS_00020520/TCO
				ENSSSCT00000036536/	NS_00022468/TCONS_00036
				TCONS_00007403/TCO	864/TCONS_00038058/TCO
				NS_00013396/TCONS_	NS_00045630/TCONS_00048
				00018210/TCONS_0002	384/TCONS_00050770/TCO
				5216/TCONS_00028503	NS_00052953/TCONS_00054
				/TCONS_00037492/TC	717/TCONS_00058416/TCO
				ONS_00046541/TCONS	NS_00066789/TCONS_00068
				_00049538/TCONS_000	370/TCONS_00083743/TCO
				50395/TCONS_0005749	NS_00084552/TCONS_00085
				9/TCONS_00063147/TC	544/TCONS_00096230/TCO
				ONS_00072374/TCONS	NS_00100528/TCONS_00100
				_00080151/TCONS_000	529
				91479	
					ENSSSCT00000004436/ENS
					SSCT00000005288/ENSSSC
Biolo	biologi			ENSSSCT00000016780/	T00000007604/ENSSSCT000
gical	cal			ENSSSCT00000032593/	00017016/ENSSSCT0000003
Proce	adhesio	4	9	TCONS_00074295/TCO	0852/TCONS_00008709/TCO
ss	n			NS_00094383	NS_00031548/TCONS_00035
					093/TCONS_00085544
Biolo	reprodu				ENSSSCT00000035973/TCO
gical	ction			TCONS_00033609	NS_00053886/TCONS_00085
Proce		1	4		534/TCONS_00085544
ss					
Biolo	multi-				TCONS_00049436/TCONS_0
gical	organis			TCONS_00003237/TCO	0053886/TCONS_00073850/
Proce	m	2	5	NS_00033609	TCONS_00085544/TCONS_0
ss	process				0100501
				ENSSSCT00000009461/	ENSSSCT00000002510/ENS
				ENSSSCT00000009859/	SSCT00000005288/ENSSSC
				ENSSSCT00000010832/	T00000007604/ENSSSCT000
				ENSSSCT00000014241/	00008247/ENSSSCT0000000
				ENSSSCT00000014800/	9813/ENSSSCT00000011053/
				ENSSSCT00000015384/	ENSSSCT00000017282/ENS
Biolo	respons			ENSSSCT00000031972/	SSCT00000025648/ENSSSC
gical	e to			ENSSSCT00000032662/	T00000026377/ENSSSCT000
Proce	stimulu	25	54	TCONS_00001840/TCO	00033729/ENSSSCT0000003
ss	s			NS_00003237/TCONS_	4484/ENSSSCT00000034640/
				00009137/TCONS_0002	ENSSSCT00000035749/ENS
				0459/TCONS_00029075	SSCT00000035973/ENSSSC
				/TCONS_00033609/TC	T00000035982/ENSSSCT000

Biological  
Processes

signaling

13

43

ONS\_00033937/TCONS\_00049007/TCONS\_00051311/TCONS\_00051555/TCONS\_00057499/TCONS\_00059949/TCONS\_00076786/TCONS\_00080151/TCONS\_00084266/TCONS\_00090200/TCONS\_00096376

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00009813/ENSSSCT00000011053/ENSSSCT00000017282/ENSSSCT00000025648/ENSSSCT00000026377/ENSSSCT00000033729/ENSSSCT000034484/ENSSSCT00000034640/ENSSSCT00000035749/ENSSSCT00000035973/ENSSSCT00000035982/ENSSSCT00000036373/TCONS\_00011158/TCONS\_00024980/TCONS\_00024981/TCONS\_00025388/TCONS\_00028230/TCONS\_00031328/TCONS\_00031548/TCONS\_00035410/TCONS\_00038058/TCONS\_00041695/TCONS\_00042856/TCONS\_00045347/TCONS\_00045349/TCONS\_00045630/TCONS\_00048384/TCONS\_00049436/TCONS\_00049673/TCONS\_00052642/TCONS\_00052953/TCONS\_00054717/TCONS\_00072603/TCONS\_00084498/TCONS\_00085534/TCONS\_00085544/TCONS\_00090841/TCONS\_00092241/TCONS\_00094370/TCONS\_00100501/TCONS\_00100528/TCONS\_00100529

NS\_00038058/TCONS\_00041  
695/TCONS\_00042856/TCO  
NS\_00045347/TCONS\_00045  
349/TCONS\_00048384/TCO  
NS\_00049436/TCONS\_00049  
673/TCONS\_00052642/TCO  
NS\_00054717/TCONS\_00072  
603/TCONS\_00084498/TCO  
NS\_00085534/TCONS\_00085  
544/TCONS\_00090841/TCO  
NS\_00092241/TCONS\_00096  
230/TCONS\_00100501/TCO  
NS\_00100528/TCONS\_00100

529

ENSSSCT0000000934/ ENSSSCT00000006733/ENS  
ENSSSCT0000001927/ SSCT00000008247/ENSSSC  
ENSSSCT0000002252/ T00000011053/ENSSSCT000  
ENSSSCT00000006699/ 00013322/ENSSSCT0000001  
ENSSSCT00000006967/ 6707/ENSSSCT00000017523/  
ENSSSCT00000009163/ ENSSSCT00000018236/ENS  
ENSSSCT00000009164/ SSCT00000018501/ENSSSC  
ENSSSCT00000009375/ T00000023398/ENSSSCT000  
ENSSSCT00000010832/ 00024741/ENSSSCT0000002  
ENSSSCT00000011308/ 7462/ENSSSCT00000028542/  
ENSSSCT00000013502/ ENSSSCT00000028884/ENS  
ENSSSCT00000013571/ SSCT00000030802/ENSSSC  
ENSSSCT00000014538/ T00000031950/ENSSSCT000  
ENSSSCT00000015432/ 00034484/ENSSSCT0000003  
ENSSSCT00000015449/ 5032/ENSSSCT00000035292/  
ENSSSCT00000018381/ ENSSSCT00000035982/TCO  
ENSSSCT00000019681/ NS\_00002883/TCONS\_00003  
ENSSSCT00000019687/ 027/TCONS\_00004796/TCO  
ENSSSCT00000022502/ NS\_00005241/TCONS\_00006  
ENSSSCT00000023318/ 314/TCONS\_00006316/TCO  
ENSSSCT00000023699/ NS\_00008348/TCONS\_00008  
ENSSSCT00000027771/ 709/TCONS\_00011474/TCO  
ENSSSCT00000028237/ NS\_00012424/TCONS\_00013  
ENSSSCT00000029625/ 318/TCONS\_00013452/TCO  
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ENSSSCT00000030903/ 536/TCONS\_00022007/TCO  
ENSSSCT00000031122/ NS\_00028230/TCONS\_00029  
ENSSSCT00000033745/ 348/TCONS\_00032031/TCO  
ENSSSCT00000036434/ NS\_00041695/TCONS\_00042  
ENSSSCT00000036440/ 856/TCONS\_00048384/TCO

Mole  
cular  
Funct  
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catalyti  
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activity

68

60

TCONS\_00001139/TCO NS\_00049436/TCONS\_00052  
 NS\_00001244/TCONS\_ 677/TCONS\_00052953/TCO  
 00004794/TCONS\_0000 NS\_00068370/TCONS\_00076  
 4931/TCONS\_00007403 154/TCONS\_00078029/TCO  
 /TCONS\_00010927/TC NS\_00083246/TCONS\_00084  
 ONS\_00012870/TCONS 390/TCONS\_00084498/TCO  
 \_00014448/TCONS\_000 NS\_00085534/TCONS\_00085  
 16859/TCONS\_0001821 544/TCONS\_00086748/TCO  
 0/TCONS\_00020459/TC NS\_00094370/TCONS\_00098  
 ONS\_00024355/TCONS 419/TCONS\_00100494/TCO  
 \_00028863/TCONS\_000 NS\_00100501/TCONS\_00100  
 32517/TCONS\_0003316 510/TCONS\_00100528/TCO  
 7/TCONS\_00033609/TC NS\_00100529/TCONS\_00100  
 ONS\_00036842/TCONS 533  
 \_00037171/TCONS\_000  
 42642/TCONS\_0004566  
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 55773/TCONS\_0005927  
 8/TCONS\_00059949/TC  
 ONS\_00064907/TCONS  
 \_00065482/TCONS\_000  
 67733/TCONS\_0007580  
 2/TCONS\_00081239/TC  
 ONS\_00083694/TCONS  
 \_00088728/TCONS\_000  
 90200/TCONS\_0009093  
 0/TCONS\_00096376/TC  
 ONS\_00098418/TCONS  
 \_00099248  
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 ENSSSCT00000003939/ T00000002650/ENSSSCT000  
 ENSSSCT00000004174/ 00002713/ENSSSCT0000000  
 ENSSSCT00000006226/ 4436/ENSSSCT00000005271/  
 ENSSSCT00000006699/ ENSSSCT00000005288/ENS  
 ENSSSCT00000006706/ SSCT00000005633/ENSSSC  
 ENSSSCT00000007206/ T00000006644/ENSSSCT000  
 ENSSSCT00000007534/ 00006733/ENSSSCT0000000  
 ENSSSCT00000008741/ 7604/ENSSSCT00000008247/  
 ENSSSCT00000010013/ ENSSSCT00000008947/ENS  
 ENSSSCT00000010832/ SSCT00000010229/ENSSSC  
 ENSSSCT00000011527/ T00000011679/ENSSSCT000

Mole  
 cular  
 Funct  
 ion

binding

84

113

ENSSSCT00000012400/ 00013322/ENSSSCT0000001  
ENSSSCT00000012465/ 3323/ENSSSCT00000015061/  
ENSSSCT00000013502/ ENSSSCT00000015660/ENS  
ENSSSCT00000014241/ SSCT00000015663/ENSSSC  
ENSSSCT00000014538/ T00000017282/ENSSSCT000  
ENSSSCT00000015432/ 00017523/ENSSSCT0000001  
ENSSSCT00000023318/ 8236/ENSSSCT00000018768/  
ENSSSCT00000025191/ ENSSSCT00000019062/ENS  
ENSSSCT00000027232/ SSCT00000019601/ENSSSC  
ENSSSCT00000030903/ T00000024980/ENSSSCT000  
ENSSSCT00000031037/ 00027235/ENSSSCT0000002  
ENSSSCT00000031122/ 8216/ENSSSCT00000028542/  
ENSSSCT00000034919/ ENSSSCT00000028884/ENS  
ENSSSCT00000036440/ SSCT00000030802/ENSSSC  
ENSSSCT00000036536/ T00000031202/ENSSSCT000  
TCONS\_00000968/TCO 00031950/ENSSSCT0000003  
NS\_00001840/TCONS\_ 2277/ENSSSCT00000032649/  
00004931/TCONS\_0001 ENSSSCT00000034484/ENS  
0673/TCONS\_00012870 SSCT00000035485/ENSSSC  
/TCONS\_00012908/TC T00000035876/ENSSSCT000  
ONS\_00013396/TCONS 00035973/ENSSSCT0000003  
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16637/TCONS\_0001821 NS\_00004822/TCONS\_00007  
0/TCONS\_00018343/TC 428/TCONS\_00008348/TCO  
ONS\_00020459/TCONS NS\_00008709/TCONS\_00011  
\_00021033/TCONS\_000 158/TCONS\_00012424/TCO  
24355/TCONS\_0002521 NS\_00014951/TCONS\_00015  
6/TCONS\_00028187/TC 685/TCONS\_00016536/TCO  
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\_00029075/TCONS\_000 991/TCONS\_00020520/TCO  
32517/TCONS\_0003316 NS\_00021034/TCONS\_00022  
7/TCONS\_00033609/TC 007/TCONS\_00024980/TCO  
ONS\_00033937/TCONS NS\_00024981/TCONS\_00025  
\_00034199/TCONS\_000 388/TCONS\_00028230/TCO  
37171/TCONS\_0004566 NS\_00029348/TCONS\_00029  
5/TCONS\_00046597/TC 651/TCONS\_00031135/TCO  
ONS\_00049007/TCONS NS\_00031328/TCONS\_00031  
\_00049538/TCONS\_000 548/TCONS\_00032179/TCO  
49672/TCONS\_0005131 NS\_00035093/TCONS\_00035  
1/TCONS\_00051555/TC 410/TCONS\_00035601/TCO  
ONS\_00052894/TCONS NS\_00037624/TCONS\_00038  
\_00055773/TCONS\_000 058/TCONS\_00041695/TCO  
57499/TCONS\_0005834 NS\_00042856/TCONS\_00045  
5/TCONS\_00059949/TC 349/TCONS\_00045630/TCO





Molecular Function	channel regulator activity protein binding transcription factor activity	1	1	TCONS_00033609	TCONS_00008348
Molecular Function	binding transcription factor activity	2	5	TCONS_00018343/TCO NS_00095452	ENSSSCT00000036290/TCO NS_00020520/TCONS_00048 384/TCONS_00052953/TCO NS_00092241
Molecular Function	transporter activity	9	10	ENSSSCT00000015449/ ENSSSCT00000017392/ ENSSSCT00000019098/ ENSSSCT00000031428/ ENSSSCT00000036440/ TCONS_00046541/TCO NS_00057499/TCONS_ 00080151/TCONS_0009 1479	ENSSSCT00000015576/ENS SSCT00000027869/TCONS_ 00004822/TCONS_00020222/ TCONS_00022468/TCONS_0 0036864/TCONS_00045630/ TCONS_00050770/TCONS_0 0068370/TCONS_00083743
Molecular Function	structural molecule activity	1	7	ENSSSCT00000002808	ENSSSCT00000008947/ENS SSCT00000018768/ENSSSC T00000019062/ENSSSCT000 00027298/ENSSSCT0000002 8216/ENSSSCT00000031509/ TCONS_00016869
Molecular Function	guanylnucleotide exchange factor activity	1	1	TCONS_00009137	TCONS_00073850
Molecular Function	lar function regulator	7	4	ENSSSCT00000014800/ ENSSSCT00000026451/ TCONS_00009137/TCO NS_00033609/TCONS_ 00080151/TCONS_0008 4266/TCONS_00094383	ENSSSCT00000025648/TCO NS_00008348/TCONS_00032 179/TCONS_00073850
Molecular Function	enzyme regulator activity	5	2	ENSSSCT00000014800/ ENSSSCT00000026451/ TCONS_00080151/TCO NS_00084266/TCONS_ 00094383	ENSSSCT00000025648/TCO NS_00032179

					ENSSSCT00000002510/ENS SSCT00000008247/ENSSSC T00000017282/ENSSSCT000 00033729/ENSSSCT0000003
Mole cular Funct ion	molecu lar transdu cer activity	5	18	ENSSSCT00000009859/ ENSSSCT00000014241/ ENSSSCT00000032662/ TCONS_00003237/TCO NS_00028503	4484/ENSSSCT00000035982/ TCONS_00011158/TCONS_0 0020520/TCONS_00031548/ TCONS_00038058/TCONS_0 0041695/TCONS_00042856/ TCONS_00048384/TCONS_0 0049436/TCONS_00049673/ TCONS_00083743/TCONS_0 0085534/TCONS_00085544
				ENSSSCT00000002252/ ENSSSCT00000002808/ ENSSSCT00000007534/ ENSSSCT00000009461/ ENSSSCT00000011308/ ENSSSCT00000013502/ ENSSSCT00000014241/ ENSSSCT00000015449/ ENSSSCT00000016961/ ENSSSCT00000018381/ ENSSSCT00000019681/ ENSSSCT00000019687/ ENSSSCT00000027771/ ENSSSCT00000028237/ ENSSSCT00000029905/ ENSSSCT00000031037/ ENSSSCT00000031122/ ENSSSCT00000033745/ ENSSSCT00000035069/ ENSSSCT00000036352/ ENSSSCT00000036434/ ENSSSCT00000036440/ TCONS_00000968/TCO NS_00001244/TCONS_ 00001840/TCONS_0000 4794/TCONS_00004931 /TCONS_00007403/TC ONS_00009137/TCONS _00010673/TCONS_000 10927/TCONS_0001339 6/TCONS_00014448/TC	ENSSSCT00000002510/ENS SSCT00000002713/ENSSSC T00000005271/ENSSSCT000 00008947/ENSSSCT0000001 3323/ENSSSCT00000015660/ ENSSSCT00000015663/ENS SSCT00000017282/ENSSSC T00000018768/ENSSSCT000 00019062/ENSSSCT0000001 9601/ENSSSCT00000027298/ ENSSSCT00000027462/ENS SSCT00000028216/ENSSSC T00000028542/ENSSSCT000 00028884/ENSSSCT0000002 9040/ENSSSCT00000030802/ ENSSSCT00000031509/ENS SSCT00000035485/ENSSSC T00000035973/ENSSSCT000 00036290/TCONS_00003027/ TCONS_00003539/TCONS_0 0004594/TCONS_00004796/ TCONS_00006377/TCONS_0 0007428/TCONS_00008348/ TCONS_00008709/TCONS_0 0011115/TCONS_00011158/ TCONS_00012424/TCONS_0 0013318/TCONS_00014951/ TCONS_00015685/TCONS_0 0016536/TCONS_00017991/ TCONS_00020520/TCONS_0 0022007/TCONS_00022468/
Cellul ar Comp onent	organel le	79	81		

ONS\_00016637/TCONS TCONS\_00024980/TCONS\_0  
 \_00018210/TCONS\_000 0024981/TCONS\_00025388/  
 18343/TCONS\_0002045 TCONS\_00028230/TCONS\_0  
 9/TCONS\_00025216/TC 0031135/TCONS\_00031328/  
 ONS\_00028187/TCONS TCONS\_00032179/TCONS\_0  
 \_00028503/TCONS\_000 0035601/TCONS\_00038058/  
 28863/TCONS\_0002907 TCONS\_00041695/TCONS\_0  
 5/TCONS\_00033167/TC 0042856/TCONS\_00045630/  
 ONS\_00033609/TCONS TCONS\_00048384/TCONS\_0  
 \_00034199/TCONS\_000 0049436/TCONS\_00049673/  
 36842/TCONS\_0003717 TCONS\_00050770/TCONS\_0  
 1/TCONS\_00042642/TC 0052642/TCONS\_00052677/  
 ONS\_00046597/TCONS TCONS\_00052953/TCONS\_0  
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 49538/TCONS\_0004967 TCONS\_00068370/TCONS\_0  
 2/TCONS\_00050395/TC 0072603/TCONS\_00073850/  
 ONS\_00051311/TCONS TCONS\_00076154/TCONS\_0  
 \_00051555/TCONS\_000 0076744/TCONS\_00077645/  
 55773/TCONS\_0005749 TCONS\_00081205/TCONS\_0  
 9/TCONS\_00059278/TC 0084390/TCONS\_00084552/  
 ONS\_00059949/TCONS TCONS\_00085505/TCONS\_0  
 \_00063147/TCONS\_000 0085544/TCONS\_00086748/  
 64907/TCONS\_0006773 TCONS\_00090841/TCONS\_0  
 3/TCONS\_00072374/TC 0092241/TCONS\_00096230/  
 ONS\_00074295/TCONS TCONS\_00100501/TCONS\_0  
 \_00076786/TCONS\_000 0100510/TCONS\_00100513/  
 80151/TCONS\_0008123 TCONS\_00100515  
 9/TCONS\_00084266/TC  
 ONS\_00087175/TCONS  
 \_00087195/TCONS\_000  
 88728/TCONS\_0009020  
 0/TCONS\_00091479/TC  
 ONS\_00094383/TCONS  
 \_00095452/TCONS\_000  
 96376/TCONS\_0009715  
 9/TCONS\_00097868/TC  
 ONS\_00099248  
 ENSSSCT00000001329/ ENSSSCT00000002510/ENS  
 ENSSSCT00000002252/ SSCT00000002713/ENSSSC  
 ENSSSCT00000002808/ T00000005271/ENSSSCT000  
 ENSSSCT00000007534/ 00008247/ENSSSCT0000000  
 ENSSSCT00000008741/ 8947/ENSSSCT00000011053/  
 ENSSSCT00000009461/ ENSSSCT00000013322/ENS  
 ENSSSCT00000011308/ SSCT00000013323/ENSSSC

Cellul  
 ar cell  
 Comp part  
 onent

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106

ENSSSCT00000011527/ T00000015576/ENSSSCT000  
ENSSSCT00000013502/ 00015660/ENSSSCT0000001  
ENSSSCT00000013571/ 5663/ENSSSCT00000017016/  
ENSSSCT00000014241/ ENSSSCT00000017282/ENS  
ENSSSCT00000015449/ SSCT00000018768/ENSSSC  
ENSSSCT00000016961/ T00000019062/ENSSSCT000  
ENSSSCT00000017392/ 00019601/ENSSSCT0000002  
ENSSSCT00000018381/ 6377/ENSSSCT00000027298/  
ENSSSCT00000019098/ ENSSSCT00000027462/ENS  
ENSSSCT00000019681/ SSCT00000027869/ENSSSC  
ENSSSCT00000019687/ T00000028216/ENSSSCT000  
ENSSSCT00000026451/ 00028542/ENSSSCT0000002  
ENSSSCT00000027771/ 8884/ENSSSCT00000029040/  
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ENSSSCT00000029905/ T00000032277/ENSSSCT000  
ENSSSCT00000031037/ 00035485/ENSSSCT0000003  
ENSSSCT00000031122/ 5973/ENSSSCT00000036290/  
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10927/TCONS\_0001287 980/TCONS\_00024981/TCO  
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33609/TCONS\_0003393 630/TCONS\_00045691/TC  
 7/TCONS\_00036842/TC NS\_00045692/TCONS\_00048  
 ONS\_00042642/TCONS 384/TCONS\_00049436/TCO  
 \_00046541/TCONS\_000 NS\_00049673/TCONS\_00050  
 46597/TCONS\_0004900 770/TCONS\_00052642/TCO  
 7/TCONS\_00049538/TC NS\_00052677/TCONS\_00052  
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 \_00050395/TCONS\_000 NS\_00058416/TCONS\_00060  
 51311/TCONS\_0005155 021/TCONS\_00060620/TCO  
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 ONS\_00057499/TCONS 603/TCONS\_00073850/TCO  
 \_00059278/TCONS\_000 NS\_00076154/TCONS\_00076  
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 \_00072374/TCONS\_000 NS\_00084498/TCONS\_00084  
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 6/TCONS\_00080151/TC NS\_00085534/TCONS\_00085  
 ONS\_00080339/TCONS 544/TCONS\_00086748/TCO  
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 ONS\_00087195/TCONS 510/TCONS\_00100513/TCO  
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 3/TCONS\_00095452/TC  
 ONS\_00096376/TCONS  
 \_00097868/TCONS\_000

99248

ENSSSCT00000001329/ ENSSSCT00000002510/ENS  
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 ENSSSCT00000008741/ 8947/ENSSSCT00000011053/  
 ENSSSCT00000009461/ ENSSSCT00000013322/ENS  
 ENSSSCT00000011308/ SSCT00000013323/ENSSSC  
 ENSSSCT00000011527/ T00000015576/ENSSSCT000  
 ENSSSCT00000013502/ 00015660/ENSSSCT0000001  
 ENSSSCT00000013571/ 5663/ENSSSCT00000017016/  
 ENSSSCT00000014241/ ENSSSCT00000017282/ENS  
 ENSSSCT00000015449/ SSCT00000018768/ENSSSC  
 ENSSSCT00000016961/ T00000019062/ENSSSCT000  
 ENSSSCT00000017392/ 00019601/ENSSSCT0000002  
 ENSSSCT00000018381/ 6377/ENSSSCT00000027298/

Cellular  
Component

cell

91

106

ENSSSCT00000019098/	ENSSSCT00000027462/ENS
ENSSSCT00000019681/	SSCT00000027869/ENSSSC
ENSSSCT00000019687/	T00000028216/ENSSSCT000
ENSSSCT00000026451/	00028542/ENSSSCT0000002
ENSSSCT00000027771/	8884/ENSSSCT00000029040/
ENSSSCT00000028237/	ENSSSCT00000030802/ENS
ENSSSCT00000029625/	SSCT00000031509/ENSSSC
ENSSSCT00000029905/	T00000032277/ENSSSCT000
ENSSSCT00000031037/	00035485/ENSSSCT0000003
ENSSSCT00000031122/	5973/ENSSSCT00000036290/
ENSSSCT00000031428/	ENSSSCT00000036373/TCO
ENSSSCT00000033745/	NS_00003027/TCONS_00003
ENSSSCT00000035069/	539/TCONS_00004594/TCO
ENSSSCT00000036352/	NS_00004796/TCONS_00004
ENSSSCT00000036434/	822/TCONS_00006377/TCO
ENSSSCT00000036440/	NS_00007428/TCONS_00008
ENSSSCT00000036536/	709/TCONS_00011115/TCO
TCONS_00000968/TCO	NS_00011158/TCONS_00012
NS_00001244/TCONS_	424/TCONS_00013318/TCO
00001840/TCONS_0000	NS_00014951/TCONS_00015
4794/TCONS_00004931	685/TCONS_00016536/TCO
/TCONS_00007403/TC	NS_00017991/TCONS_00020
ONS_00009137/TCONS	520/TCONS_00022007/TCO
_00010673/TCONS_000	NS_00022468/TCONS_00024
10927/TCONS_0001287	980/TCONS_00024981/TCO
0/TCONS_00012908/TC	NS_00025388/TCONS_00028
ONS_00013396/TCONS	230/TCONS_00028709/TCO
_00014448/TCONS_000	NS_00029348/TCONS_00031
16637/TCONS_0001821	135/TCONS_00031328/TCO
0/TCONS_00018343/TC	NS_00032179/TCONS_00035
ONS_00020459/TCONS	093/TCONS_00035410/TCO
_00025216/TCONS_000	NS_00035601/TCONS_00038
28187/TCONS_0002850	058/TCONS_00041695/TCO
3/TCONS_00028863/TC	NS_00042603/TCONS_00042
ONS_00029075/TCONS	856/TCONS_00045347/TCO
_00033167/TCONS_000	NS_00045349/TCONS_00045
33609/TCONS_0003393	630/TCONS_00045691/TCO
7/TCONS_00036842/TC	NS_00045692/TCONS_00048
ONS_00042642/TCONS	384/TCONS_00049436/TCO
_00046541/TCONS_000	NS_00049673/TCONS_00050
46597/TCONS_0004900	770/TCONS_00052642/TCO
7/TCONS_00049538/TC	NS_00052677/TCONS_00052
ONS_00049672/TCONS	953/TCONS_00054717/TCO
_00050395/TCONS_000	NS_00058416/TCONS_00060

				51311/TCONS_0005155	021/TCONS_00060620/TC
				5/TCONS_00055773/TC	NS_00065835/TCONS_00072
				ONS_00057499/TCONS	603/TCONS_00073850/TCO
				_00059278/TCONS_000	NS_00076154/TCONS_00076
				59949/TCONS_0006314	744/TCONS_00077645/TCO
				7/TCONS_00064907/TC	NS_00078029/TCONS_00081
				ONS_00067733/TCONS	205/TCONS_00084390/TCO
				_00072374/TCONS_000	NS_00084498/TCONS_00084
				74295/TCONS_0007678	552/TCONS_00085505/TCO
				6/TCONS_00080151/TC	NS_00085534/TCONS_00085
				ONS_00080339/TCONS	544/TCONS_00086748/TCO
				_00081239/TCONS_000	NS_00090841/TCONS_00092
				83694/TCONS_0008426	241/TCONS_00096230/TCO
				6/TCONS_00087175/TC	NS_00100501/TCONS_00100
				ONS_00087195/TCONS	510/TCONS_00100513/TCO
				_00090200/TCONS_000	NS_00100515/TCONS_00100
				91479/TCONS_0009438	528/TCONS_00100529
				3/TCONS_00095452/TC	
				ONS_00096376/TCONS	
				_00097868/TCONS_000	
				99248	
				TCONS_00001840/TCO	
				NS_00004931/TCONS_	ENSSSCT00000005271/ENS
				00007403/TCONS_0001	SSCT00000013323/ENSSSC
				4448/TCONS_00016637	T00000036290/TCONS_0000
				/TCONS_00018210/TC	3027/TCONS_00004594/TCO
				ONS_00018343/TCONS	NS_00006377/TCONS_00007
				_00020459/TCONS_000	428/TCONS_00008709/TCO
				25216/TCONS_0002886	NS_00012424/TCONS_00015
				3/TCONS_00033609/TC	685/TCONS_00016536/TCO
				ONS_00042642/TCONS	NS_00022468/TCONS_00031
				_00049672/TCONS_000	328/TCONS_00035601/TCO
				50395/TCONS_0005131	NS_00038058/TCONS_00041
				1/TCONS_00051555/TC	695/TCONS_00045630/TCO
				ONS_00055773/TCONS	NS_00049673/TCONS_00052
				_00057499/TCONS_000	642/TCONS_00052953/TCO
				59278/TCONS_0005994	NS_00058416/TCONS_00068
				9/TCONS_00063147/TC	370/TCONS_00073850/TCO
				ONS_00064907/TCONS	NS_00076154/TCONS_00077
				_00072374/TCONS_000	645/TCONS_00081205/TCO
				87175/TCONS_0008719	NS_00084552/TCONS_00086
				5/TCONS_00090200/TC	748/TCONS_00092241/TCO
				ONS_00094383/TCONS	NS_00096230/TCONS_00100
				_00096376	501

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Cellular Component	nucleoid	2	0	TCONS_00020459/TCONS_00046597	
Cellular Component	membrane-enclosed lumen	12	13	TCONS_00001840/TCONS_00004931/TCONS_00007403/TCONS_00014448/TCONS_00018343/TCONS_00033609/TCONS_00049672/TCONS_00055773/TCONS_00063147/TCONS_00072374/TCONS_00087175/TCONS_00096376	ENSSSCT00000005271/ENSSSCT00000013323/ENSSSCT00000036290/TCONS_0003027/TCONS_00015685/TCONS_00016536/TCONS_00038058/TCONS_00049673/TCONS_00052642/TCONS_00052953/TCONS_00073850/TCONS_00092241/TCONS_00100501
Cellular Component	collagen trimer	0	2		TCONS_00016869/TCONS_00016870
Cellular Component	membrane part	13	24	TCONS_00003237/TCONS_00028503/TCONS_00036842/TCONS_00037492/TCONS_00046541/TCONS_00049672/TCONS_00051555/TCONS_00057499/TCONS_00063147/TCONS_00074295/TCONS_00080151/TCONS_00087195/TCONS_00091479	TCONS_00004822/TCONS_00008709/TCONS_00011158/TCONS_00014951/TCONS_00020222/TCONS_00022468/TCONS_00031548/TCONS_00035093/TCONS_00049436/TCONS_00049673/TCONS_00050770/TCONS_00053886/TCONS_00054717/TCONS_00058416/TCONS_00066789/TCONS_00068370/TCONS_00076154/TCONS_00077645/TCONS_00083743/TCONS_00084552/TCONS_00085534/TCONS_00085544/TCONS_00096230/TCONS_00098627
Cellular Component	extracellular matrix	1	7	TCONS_00094383	ENSSSCT00000007604/ENSSSCT00000031950/TCONS_00014951/TCONS_00016869/TCONS_00016870/TCONS_00028230/TCONS_00083246
Cellular Component	extracellular matrix component	1	3	TCONS_00094383	TCONS_00016869/TCONS_00016870/TCONS_00028230

Cellular Component	cell junction	3	6	TCONS_00057499/TCONS_00074295/TCONS_00097868	TCONS_00008709/TCONS_00045691/TCONS_00045692/TCONS_00085544/TCONS_00096230/TCONS_00098627/ENSSSCT00000002713/ENSSSCT00000008247/ENSSSCT00000001329/T00000011053/ENSSSCT0000000031428/00015576/ENSSSCT00000017016/ENSSSCT00000027869/ENSSSCT00000036373/TCONS_00000968/TCONS_00001840/TCONS_00003237/TCONS_0009137/TCONS_00014448/TCONS_00018210/TCONS_00020459/TCONS_00025216/TCONS_00028503/TCONS_00033609/TCONS_00033937/TCONS_00036842/TCONS_00037492/TCONS_00042642/TCONS_00046541/TCONS_00049007/TCONS_00049672/TCONS_00051555/TCONS_00055773/TCONS_00057499/TCONS_00059278/TCONS_00063147/TCONS_00072374/TCONS_00074295/TCONS_00080151/TCONS_00087195/TCONS_00090200/TCONS_00091479/TCONS_00097868	TCONS_00008709/TCONS_0001158/TCONS_00012424/TCONS_00014951/TCONS_00020222/TCONS_00022468/TCONS_00025388/TCONS_00031328/TCONS_00031548/TCONS_00035093/TCONS_00045630/TCONS_00045691/TCONS_00049436/TCONS_00049673/TCONS_00050770/TCONS_00052953/TCONS_00053886/TCONS_00054717/TCONS_00058416/TCONS_00066789/TCONS_00068370/TCONS_00073850/TCONS_00076154/TCONS_00077645/TCONS_00083743/TCONS_00084552/TCONS_00085534/TCONS_00085544/TCONS_00096230/TCONS_00100501
Cellular Component	membrane	31	42	ENSSSCT00000001329/ENSSSCT00000002808/ENSSSCT00000008741/ENSSSCT00000013571/ENSSSCT00000017392/ENSSSCT00000019098/ENSSSCT00000026451/ENSSSCT00000035069/ENSSSCT00000036352/ENSSSCT00000036536/	ENSSSCT00000005271/ENSSSCT00000008247/ENSSSCT00000008947/ENSSSCT000000019062/ENSSSCT00000019601/ENSSSCT00000027298/ENSSSCT00000027462/ENSSSCT00000028216/ENSSSCT000030802/ENSSSCT00000031509/ENSSSCT00000032277/	
Cellular Component	macromolecular complex	24	30			

					TCONS_00000968/TCO NS_00004931/TCONS_ 00012908/TCONS_0001 8210/TCONS_00018343 /TCONS_00028187/TC ONS_00055773/TCONS _00063147/TCONS_000 72374/TCONS_0008015 1/TCONS_00083694/TC ONS_00087175/TCONS _00091479/TCONS_000 96376	ENSSSCT00000035973/ENS SSCT00000036290/TCONS_ 00006377/TCONS_00007428/ TCONS_00016536/TCONS_0 0016869/TCONS_00016870/ TCONS_00022007/TCONS_0 0049436/TCONS_00052642/ TCONS_00065835/TCONS_0 0073850/TCONS_00081205/ TCONS_00084498/TCONS_0 0086748/TCONS_00092241/ TCONS_00096230/TCONS_0 0100501
Cellul ar Comp onent	synapse part	0	2		TCONS_00042856/TCONS_0 0096230	
Cellul ar Comp onent	synapse	0	2		TCONS_00042856/TCONS_0 0096230	
Cellul ar Comp onent	extracel lular region part	1	9	ENSSSCT00000014800	ENSSSCT00000005288/ENS SSCT00000007604/ENSSSC T00000009813/ENSSSCT000 00031950/ENSSSCT0000003 4640/TCONS_00031548/TCO NS_00045630/TCONS_00054 717/TCONS_00085544 ENSSSCT00000004436/ENS SSCT00000005288/ENSSSC T00000007604/ENSSSCT000 00009813/ENSSSCT0000003 1950/ENSSSCT00000034640/ TCONS_00031548/TCONS_0 0045630/TCONS_00054717/ TCONS_00085544	
Cellul ar Comp onent	extracel lular region	2	10	ENSSSCT00000014800/ ENSSSCT00000031972	ENSSSCT00000005288/ENS SSCT00000007604/ENSSSC T00000009813/ENSSSCT0000003 1950/ENSSSCT00000034640/ TCONS_00031548/TCONS_0 0045630/TCONS_00054717/ TCONS_00085544	

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