

Supplementary Table Gene Content

*Ephydatia muelleri* gene content determined by blast. The top blast hits for each gene are shown with the probability (e-value). Green=present; Yellow=divergent ortholog; Red=absent from the genome

Gene category	NCBI Gene name	E muelleri hits Gene names	e value	P/A
<b><i>MDB Pathway</i></b>				
CHD3	chromodomain helicase DNA binding protein 3	Em0008g1027a	0	<div></div>
CHD4	chromodomain helicase DNA binding protein 4	Em0008g1027a	0	<div></div>
CHD5	chromodomain helicase DNA binding protein 5	Em0003g1398a	0	<div></div>
HDAC1	histone deacetylase 1	Em0011g119a	-140	<div></div>
HDAC2	histone deacetylase 2	Em0011g119a	-137	<div></div>
MBD2	methyl-CpG binding domain protein 2	m0007g1367a	0.21	<div></div>
MBD3	methyl-CpG binding domain protein 3	Em0015g1268a	0.064	<div></div>
MTA1	metastasis associated 1	Em0019g569a, Em0019g560a	-105	<div></div>
RBBP4	RB binding protein 4, chromatin remodeling factor	Em0023g375a	0	<div></div>
GATAD2A	GATA zinc finger domain containing 2A	Em0009g427a	0.007	<div></div>
GATAD2B	GATA zinc finger domain containing 2B	Em0012g312a	0.025	<div></div>
DNMT1	DNA methyltransferase 1	Em0016g1020a, Em0020g6a	0	<div></div>
DNMT3A	DNA methyltransferase 3 alpha	Em0006g900a	-89	<div></div>
<b><i>RNAi Machinery</i></b>				
DICER1	dicer 1, ribonuclease III	Em0019g657a	-114	<div></div>
IFIH1	interferon induced with helicase C domain 1	Em0004g961a, Em0006g501a, Em0039g31a	-56	<div></div>
DHX58	DExH-box helicase 58	Em0004g961a, Em0006g498a	-55	<div></div>
FANCM	FA complementation group M	Em0020g1101a	-179	<div></div>
DDX58	ATP-dependent RNA helicase DDX58	Em0006g498a, Em0006g501a	-71	<div></div>
PIWIL1	piwi like RNA-mediated gene silencing 1	Em0015g964a	0	<div></div>
PIWIL2	piwi like RNA-mediated gene silencing 2	Em0017g775a	0	<div></div>
PIWIL3	piwi like RNA-mediated gene silencing 3	Em0015g964a	0	<div></div>
PIWIL4	piwi like RNA-mediated gene silencing 4	Em0015g964a	0	<div></div>
AGO1	argonaute RISC component 1	Em0015g964a, Em0017g775a	-40	<div></div>
AGO2	argonaute RISC component 2	Em0017g775a, Em0015g964a	-40	<div></div>
TARBP2	TARBP2 subunit of RISC loading complex	Em0023g405a	-7	<div></div>
DGCR8	DGCR8 microprocessor complex subunit	Em0011g505a	-44	<div></div>
<b><i>Cell signaling pathways</i></b>				
<b>Hedgehog Signaling</b>				<div></div>
Ptc	Patched 1	Em0003g215a	-15	<div></div>
Smo	smoothened, frizzled class receptor	Em0012g384a	-30	<div></div>
SUFU	SUFU negative regulator of hedgehog signaling	Em0004g1352a	-87	<div></div>
HHIP	hedgehog interacting protein	Em007g755a, Em007g757a, Em0023g526a	0	<div></div>
PKA	protein kinase cAMP-activated catalytic subunit	Em0020g922a	-129	<div></div>
cos2/ KIF7	Kinesin-like protein KIF7	Em0008g287a	-83	<div></div>
Gli	GLI family zinc finger 1	Em0007g214a	-75	<div></div>
CKI	casein kinase 1 epsilon	Em0020g644a	-162	<div></div>
GSK3	Glycogen synthase kinase-3 alpha	Em0006g1044a	-154	<div></div>
fused	Serine/threonine-protein kinase 36 (fused homo	Em0018g1081a, Em0015g1158a	-42	<div></div>
Slimb/ FBXW11	F-box and WD repeat domain containing 11	Em0013g821a	-178	<div></div>
Disp	dispatched RND transporter family member 1	Em0008g1258a, Em0657g4a	-15	<div></div>
Hedgeling	Amphimedon hedgling	Em0007g755a	0	<div></div>
Dsh	Double-stranded RNA-specific adenosine deam	Em0037g9a, Em0017g314a	-88	<div></div>
<b>TGF-beta</b>				<div></div>
TGF-b	transforming growth factor beta 1	Em0015g1213a, Em0015g1236a, Em0019g98a	-28	<div></div>
TGF-b receptor	TGF-beta receptor type-1	Em0012g37a	-103	<div></div>
Noggin/ Nog	Noggin	Em0014g630a	-12	<div></div>
Gro/ CXCL1	C-X-C motif chemokine ligand 1	Em0021g962a	3.7	<div></div>
Activin-receptor	Activin receptor type-1	Em0012g36a, Em0012g9a	-105	<div></div>
LRP	Low density lipoprotein	Em0011g684a, Em0010g765a, Em0002g1023a	-20	<div></div>
<b>Notch/Delta</b>				<div></div>
Notch/ NOTC1	Neurogenic locus notch homolog	Em0115g6a	0	<div></div>
Delta	Delta	Em0018g256a, Em0115g5a	-66	<div></div>
Jagged	Protein jagged-1	Em0011g1192a	-137	<div></div>
<b>Wnt</b>				<div></div>
Wnt	Proto-oncogene Wnt-1	Em0008g1080a	-43	<div></div>
	0 Proto-oncogene Wnt-3	Em0012g1035a	-41	<div></div>
WIF	WNT inhibitory factor 1	Em0115g5a, Em0018g257a	-21	<div></div>
Porc	Protein-serine O-palmitoleoyltransferase porc	Em0016g421a	-64	<div></div>
Notum	palmitoleoyl-protein carboxylesterase	Em0021g945a, Em0009g1239a	-25	<div></div>
CKIe	casein kinase 1 epsilon	Em0020g644a	-162	<div></div>
CKIa	casein kinase 1 alpha 1 like	Em0013g329a	-148	<div></div>
CK2	casein kinase 2 alpha 1	Em0018g165a, Em0016g68a, Em0016g82a	-158	<div></div>
B-catenin	Catenin beta-1	Em0012g557a, Em0012g536a	-177	<div></div>
GSK3B	glycogen synthase kinase 3 beta	Em0006g1044a	-171	<div></div>

Gene category	NCBI Gene name	E muelleri hits Gene names	e value	P/A
GSK3-beta intera	GSK3-beta interaction protein	Em0004g929a	0	●
APC	APC regulator of WNT signaling pathway	Em0010g855a	-66	●
Axin	axin 1	Em0020g197a	-7	●
SFRP	Secreted frizzled-related protein	Em0016g747a, Em0016g751a, Em0016g746a, Em0016g750a, Em0016g745a	-13	●
	0 Secreted frizzled-related protein 3	Em0012g238a	-15	
Frizzled	frizzled receptor/ Secreted frizzled-related protei	Em0012g384a, Em0023g388a, Em0012g14a	-15	●
Dkk	dickkopf WNT signaling pathway inhibitor 1	Em0010g848a	0.62	●
CBP	poly(rc)-binding protein	Em0007g260a, Em0022g450a	-60	●
SMAD1	Mothers against decapentaplegic homolog 1	Em0022g765a, Em0810g2a, Em0810g3a	-148	●
SMAD4	Mothers against decapentaplegic homolog 4	Em0010g75a, Em0010g45a, Em0648g4a	-106	●
WLS	Wnt ligand secretion mediator	Em0011g389a, Em0011g6a	-38	●
Cer-1	cerberus 1, DAN family BMP antagonist	no hits	0	●
PEDF	serpin family F member 1	no hits	0	●
SOST	sclerostin	no hits	0	●
RSPO1	R-spondin 1	Em0009g1128a, Em0009g1139a	-7	●
LGR4	leucine rich repeat containing G protein-coupled	Em0003g1326a	-32	●
RNF43	ring finger protein 43	no sig hits	0	●
ZNRF3	zinc and ring finger 3	no sig hits	0	●
LRP5/6	LDL receptor related protein 6	Em0010g765a, Em0002g1023a, Em0003g1221a	-98	●
BAMBI	BMP and activin membrane bound inhibitor	no sig hits	0	●
Idax	Dvl-binding protein IDAX	no sig hits	0	●
DVL1	dishevelled segment polarity protein 1	Em0008g347a, Em0019g830a	-73	●
AXAM2	sentrin-specific protease 2 (axin associating mo	Em0076g2a, Em0011g1018a, Em0768g1a	-22	●
GBP (FRAT1)	FRAT regulator of WNT signaling pathway 1	no sig hits	0	●
PS-1	presenilin 1	no sig hit	0	●
PKA	protein kinase cAMP-activated catalytic subunit	Em0011g81a	-155	●
RYK	receptor like tyrosine kinase	Em0021g39a	-57	●
ROR1/2	receptor tyrosine kinase like orphan receptor 1	Em0018g1165a	-83	●
Knypek	K-glypican, glypican 4	Em0021g142a	-12	●
Stbm	VANGL planar cell polarity protein 2	no sig hits	0	●
Nkd	NKD inhibitor of WNT signaling pathway 1	no sig hits	0	●
p53	tumor protein p53		0	●
Siah-1	siah E3 ubiquitin protein ligase 1	Em0003g1558a	-112	●
SIP	calcyclin binding protein	Em0016g544a	-31	●
Skp1	S-phase kinase associated protein 1	Em0007g982a	-58	●
TBL1	transducin beta like 1 X-linked	Em1340g2a	-32	●
Prickle	prickle planar cell polarity protein 1	Em0023g581a	-58	●
INVS	inversin	Em0012g1094a, Em0021g744a, Em0021g733a	-120	●
Daam1/2	dishevelled associated activator of morphogene	Em0022g422a, Em0020g318a, Em0015g844a	-36	●
ROCK2	Rho-associated protein kinase 2	Em0015g877a	-98	●
JNK	mitogen-activated protein kinase 8	Em0002g1177a	-116	●
PLC	phospholipase C beta 1	Em0006g969a	-133	●
CaMKII	calcium/calmodulin dependent protein kinase II	Em0012g965a, Em0001g1211a, Em0001g1272a	-135	●
CaN	protein phosphatase 3 catalytic subunit alpha	Em0002g1605a	0	●
PKC	protein kinase C alpha	Em0020g1088a	0	●
NFAT	nuclear factor of activated T cells 1	Em0022g704a	0	●
RhoA	Ras homolog gene family, member A	Em0004g1702a plus many	0	●
RAC1/2/3	Rac family small GTPase 1, Rac family small G	Em0007g856a plus many	0	●
<b>MAPK signaling from Canonical Wnt</b>				
CKIa	casein kinase 1 alpha 1 like	Em0013g329a	-148	●
B-TrCP	F-box and WD repeat domain containing 11	Em0013g821a	-178	●
Skp1	S-phase kinase associated protein 1	Em0007g982a	-58	●
Cul1	cullin 1	Em0007g577a	0	●
Rbx1	ring-box 1	Em0022g219a	-54	●
TAK1	mitogen-activated protein kinase kinase kinase	Em0023g663a	-44	●
ICAT	catenin beta interacting protein 1	Em0008g1271a	-7	●
NLK	nemo like kinase	Em0015g1255a	-122	●
CBY1	chibby family member 1, beta catenin antagonis	Em0020g453a	-9	●
Duplin	chromodomain helicase DNA binding protein 8	Em0018g1127a	-151	●
Xsox17	SRY-box transcription factor 17	no sig hits	0	●
Pontin52	RuvB like AAA ATPase 1	Em0011g786a	0	●
SMAD4	Mothers against decapentaplegic homolog 4	Em0010g75a	-106	●
SMAD3	SMAD family member 3	Em0022g765a	0	●
CBP	poly(rc)-binding protein	Em0007g260a	-60	●
TCF/LEF	lymphoid enhancer binding factor 1	Em0002g42a	-34	●
CtBP	C-terminal binding protein 1	Em0013g121a	-54	●
d-Catenin	catenin delta 2	Em0017g517a	-38	●
c-myc	MYC proto-oncogene, bHLH transcription factor	Em0023g45a	-19	●
c-jun	Jun proto-oncogene, AP-1 transcription factor s	Em0011g1167a	-17	●
fra-1	FOS like 1, AP-1 transcription factor subunit	Em0019g326a	0	●
cycD	cyclin D2	Em0021g487a	-15	●
WISP1	WNT1-inducible-signaling pathway protein 1	Em0012g778a	-5	●
PPARG	peroxisome proliferator activated receptor delta	Em0001g69a	-29	●
Uterine	matrix metallopeptidase 7	no sig hits	0	●

Gene category	NCBI Gene name	E muelleri hits Gene names	e value	P/A
<b>Chemical signaling</b>				
<b>Vesicle secretion/PSD type genes</b>				
B-catenin	Catenin beta-1	Em0012g557a	-177	●
CAMKII	calcium calmodulin protein Kinase II	Em0012g965a	-167	●
citron	Citron Rho-interacting kinase	Em0015g877a	-107	●
cortactin	Src substrate cortactin	Em0021g307a	-109	●
cript	Cysteine-rich PDZ-binding protein	Em0019g314a	-41	●
GKAP	G kinase-anchoring protein 1	Em0009g162a, Em0009g138a	-20	●
Ephrin-receptor	Ephrin receptor	Em0008g185a, Em0008g186a	-93	●
Homer	Homer protein homolog 1	Em0009g974a	-46	●
IP3R	Inositol 1,4,5-trisphosphate receptor type 1	Em0014g49a	-95	●
PKC	Protein kinase C alpha type	Em0020g1088a, Em0019g897a, Em0019g897a	0	●
PMCA	Plasma membrane calcium-transporting ATPase	Em0014g439a	0	●
DLG	Disks large homolog 1	Em0021g795a, Em0021g788a	-163	●
Erb-receptor	Receptor tyrosine-protein kinase erbB-2	Em0012g156a, Em0001g1133a	-78	●
GRIP	Glutamate receptor-interacting protein 1	Em0021g795a, Em0021g788a	-17	●
MAGI	Membrane-associated guanylate kinase, WW domain	Em0001g3274a, Em0001g3266a	-27	●
PICK1	PRKCA-binding protein	Em0020g828a	-45	●
Shank	SH3 and multiple ankyrin repeat domains protein	Em0021g394a	-63	●
SPAR	Small regulatory polypeptide of amino acid response	Em0006g871a	0.35	●
Lin7	Protein lin-7 homolog A	Em0003g1413a	-51	●
<b>Glutamate</b>				
GLI5	glutaminase [Homo sapiens]	Em0019g204a	-12	●
Glud1	glutamate dehydrogenase [Homo sapiens]	none	0	●
mGluR	metabotropic glutamate receptor 1 isoform alpha	Em0026g49a, Em0026g54a	-128	●
		Em0468g1a, Em0312g2a, Em0022g766a	-118	●
		Em0003g578a, Em0003g599a, Em0003g477a	-54	●
		Em0024g62a, Em0024g79a	-116	●
iGluR	Glutamate receptor ionotropic, kainate 1	Em0024g62a, Em0006g1337a	-4	●
GAD	Glutamate decarboxylase GAD1 protein [Homo sapiens]	Em0001g1154a	-65	●
EAAT	glutamate transporter [Mus musculus]	Em0011g1007a	-16	●
VGlut1	Brain-specific Na(+)-dependent inorganic phosphate	Em0074g13a	-89	●
GABA				
GABA	Gamma-aminobutyric acid type B receptor subunit	Em0016g376a	-97	●
		Em0016g375a		●
		Em0020g696a		●
		Em0020g695a		●
		Em0013g421a		●
		Em0013g917a		●
		Em0013g425a		●
		Em0816g3a		●
		Em0006g1271a		●
		Em0006g1258a		●
ABAT	4-aminobutyrate aminotransferase, mitochondrial	Em0013g271a	-5	●
TAT	tyrosine aminotransferase [Homo sapiens]	Em0018g57a	-146	●
<b>Monamine neurotransmitter molecules</b>				
5HT receptor	5-hydroxytryptamine receptor 5B	Em0010g751a	-10	●
TpH	tryptophan 5-hydroxylase 1 [Homo sapiens]	Em0021g279a	-145	●
AADC	aromatic-L-amino-acid decarboxylase isoform 4	Em0001g1154a, Em0001g1241a	-37	●
	0 dopa decarboxylase, isoform D [Drosophila melanogaster]	Em0001g1241a	-28	●
Th	tyrosine hydroxylase [Mus musculus]	>Em0021g279a	-134	●
Qdpr	Quinoid dihydropteridine reductase [Mus musculus]	>Em0013g272a	-85	●
slc18a2	solute carrier organic anion transporter family member	Em0005g710a, Em0094g15a, Em0005g832a	-75	●
PaH	phenylalanine hydroxylase [Homo sapiens]	Em0021g279a, Em0009g692a	-167	●
Dbh	dopamine-beta-hydroxylase [Mus musculus]	>Em0006g282a	-77	●
Pnmt	phenylethanolamine-N-methyltransferase [Mus musculus]	Em0014g635a	-15	●
Dopamine receptor	beta-2 adrenergic receptor [Mus musculus]	Em0010g751a	-9	●
			0	
			0	
			0	
<b>Nitric Oxide</b>				
NOS	nitric oxide synthase [Mus musculus domesticus]	Em0015g78a, Em0162g6a	0	●
sGC	guanylate cyclase [Mus musculus]	Em0011g518a	-149	●
PKG-1	cGMP-dependent protein kinase 1 isoform 1 [Homo sapiens]	>Em0010g719a	0	●
<b>Acetylcholinesterase</b>				
Ach	acetylcholinesterase precursor [Bos taurus]	Em0021g924a	-36	●
<b>Immune Genes</b>				
IRAK-4	Interleukin-1 receptor-associated kinase 4	Em0009g49a	-46	●
Toll-receptor-like	Toll-like receptor 2 (TLR2)	Em0012g672a, Em0012g665a	-11	●
MyD88	Myeloid differentiation primary response protein	Em0024g416a	-22	●
A2M	Alpha-2-macroglobulin	Em0003g56a	0.98	●



Gene category	NCBI Gene name	E muelleri hits Gene names	e value	P/A
Nf_kb	Nuclear factor NF-kappa-B p105 subunit	Em0006g1255a, Em0249g3a	-109	●
MASP	Mannan-binding lectin serine protease 1	Em0023g351a	-23	●
IKK	Inhibitor of nuclear factor kappa-B kinase subunit 1	Em0010g935a, Em0019g38a, Em0006g1249a, Em0011g81a, Em0010g723a	-22	●
	Inhibitor of nuclear factor kappa-B kinase subunit 2	Em0015g304a, Em0015g296a	-26	●
	Inhibitor of nuclear factor kappa-B kinase subunit 3	Em0001g894a	-37	●
TAK1	Nuclear receptor subfamily 2 group C member 2	Em0001g69a, Em0001g70a, Em0001g73a, Em0001g71a	-25	●
TRAF	TNF receptor-associated factor 1	Em0004g908a	-51	●
	TNF receptor-associated factor 2	Em0016g278a	-77	●
	TNF receptor-associated factor 3	Em0008g709a	-98	●
	TNF receptor-associated factor 4	Em0008g751a	-44	●
	E3 ubiquitin-protein ligase TRAF7	Em0020g1004a	-177	●
<b>Epithelial genes</b>				
alpha-catenin	Catenin alpha-1	Em0013g145a	-95	●
delta-catenin	Catenin delta-1	Em0017g517a	-31	●
Vinculin	Vinculin	Em0017g182a	-61	●
nidogen	Nidogen-1	Em0010g765a	-38	●
	0 Nidogen-2	Em0023g304a, Em0001g322a, Em0023g300a	-34	●
	Basement membrane-specific heparan sulfate proteoglycan	Em0011g1158a	-95	●
Collagen-Type-I	Collagen type IV hydra vulgaris	Em0006g916a	-98	●
SSCC	Spongins short chain collagen (Efluvialis)	Em0001g1342a, Em0001g1339a	0	●
Par6	Partitioning defective 6 homolog alpha	Em0018g717a	-65	●
Scribble (SCRIB)	Protein scribble homolog	Em0005g1163a	-104	●
Stardust	MAGUK p55 subfamily member 7 (MPP7)	Em0012g1042a	-66	●
Crumbs	Protein crumbs homolog 1	Em0011g1192a	-101	●
Neurexin	Neurexin-1	Em0022g301a	-23	●
Claudin	Claudin	Em0008g1042a	-6	●
Patj	InaD-like protein/ Pals1-associated tight junction protein	Em0011g11a	-45	●
Contactin	Contactin-1	Em0006g1150a	-39	●
Laminin	Laminin subunit alpha-1	Em0016g522a, Em0016g530a, Em0019g102a	-98	●
Collagen-XI	Collagen alpha-1(XI) chain	Em0075g5a, Em0007g546a, Em0007g528a, Em0007g559a	-23	●
	0 Collagen alpha-2(XI) chain	Em0006g932a	-32	●
Paxillin	Paxillin (PXN)	Em0015g714a	-113	●
Talin	Talin-1	Em0010g62a	0	●
	0 Talin-2	Em0010g50a	0	●
alpha-actinin	Alpha-actinin 1	Em0019g756a, Em0014g868a	-125	●
	0 Alpha-actinin 4	Em0019g756a	-122	●
FAK	Focal adhesion kinase 1	Em0008g879a, Em0010g799a, Em0021g626a	-59	●
ILK	Integrin-linked protein kinase	Em0022g205a	-49	●
<b>Reproductive genes</b>				
vasa	vasa isoform A	Em0011g60a, Em0021g68a, Em0021g63a, Em0009g187a	4e-162,	●
PL10	PL10 protein [Ephydatia muelleri]	Em0021g68a, Em0021g63a	3e-133,	●
nanos	nanos	Em0013g491a	9e-47,	●
Piwi	Piwi	Em0015g964a	0.0,	●
Piwi	Piwi	Em0017g775a	9e-158,	●
mago-nashi	Protein mago nashi homolog	Em0010g175a	-32	●
Tsunagi/ RBM8	RNA-binding protein 8A	Em0009g1156a	-37	●
Smaug/ SAMD4	Protein Smaug homolog 1	Em0019g306a	-26	●
maelstrom	maelstrom	Em0006g1227a, Em0006g1236a	3e-133,	●
Germ-cell-less	Germ cell-less protein-like 1	Em0011g247a	-11	●
Pumilio	Pumilio homolog 1	Em0005g1324a, Em0011g28a	-78	●
Boule	Protein boule-like (BOLL)	Em0004g1595a	-20	●
bruno	bruno 1, isoform G [Drosophila melanogaster]	NONE	0	●
FEM1	Protein fem-1 homolog A	Em0005g1212a, Em0018g302a	-34	●
DMRT1	Doublesex- and mab-3-related transcription factor 1	Em0006g916a	5	●
Vitellogenin	Microsomal triglyceride transfer protein large subunit	Em0092g12a	0.018	●
Attractin	Attractin	Em0013g44a	-48	●
musashi	RNA-binding protein Musashi homolog 2 isoform 1	Em0015g1117a	2e-11,	●
tudor	tudor [Tribolium castaneum]	Em0151g7a	1e-29,	●
		Em0023g207a	3e-29,	●
		Em0011g41a	3e-24,	●
		Em0010g41a	6e-18,	●
		Em0013g844a	5e-14,	●
		Em1196g1a	1e-13,	●
		Em1275g1a	2e-13,	●
		Em0013g845a	2e-13,	●
		Em0531g2a	8e-13,	●
		Em0016g1178a	1e-11,	●
R-spondin 1	R-Spondin 1 mouse	NONE	0	●
Sox9	SOX9 [Homo sapiens]	Em0023g195a	2e-34,	●
Sox9	SOX9 [Homo sapiens]	Em0021g940a	5e-27,	●
Sox8	SRY (sex determining region Y)-box 8, isoform 1	Em0023g195a	6e-10,	●
Sox8	SRY (sex determining region Y)-box 8, isoform 2	Em0021g940a	2e-08,	●
Sox8	SRY (sex determining region Y)-box 8, isoform 3	Em0023g270a	3e-06,	●

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<b>Biom mineralization</b>				
Silicatein	Silicatein (Petrosia ficiformis)	Em0017g930a	2e-129,	●
Silicatein	Silicatein (Petrosia ficiformis)	Em0011g351a	4e-116,	●
Silicatein	Silicatein (Petrosia ficiformis)	Em0056g25a	3e-115,	●
Silicatein	Silicatein (Petrosia ficiformis)	Em0003g1460a	3e-115,	●
Silicatein	Silicatein (Petrosia ficiformis)	Em0011g357a	4e-115,	●
Silicatein	Silicatein (Petrosia ficiformis)	Em0011g353a	3e-114,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0014g564a	0.0,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0014g563a	0.0,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0014g565a	2e-131,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0614g1a	1e-87,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0019g920a	5e-28,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0246g8a	3e-27,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0007g1442a	5e-26,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0019g930a	6e-22,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0019g928a	1e-21,	●
Aquaporin 9	Aquaporin (Ephydatia fluviatilis)	Em0246g9a	2e-21,	●
Silintaphin 1	silintaphin-1 [Suberites domuncula]	Em0022g61a	2e-27,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0014g599a	2e-47,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0014g559a	2e-45,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0014g586a	1e-38,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0557g4a	3e-35,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0016g908a	3e-35,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0008g787a	3e-35,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0436g4a	3e-35,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0436g3a	3e-35,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0003g1270a	3e-35,	●
Silicase	CA_SubDo [Suberites domuncula] (Carbonic an	Em0003g1269a	3e-35,	●
ArsB transporte	PREDICTED: putative transporter arsB [Amphin	Em0023g939a	0.0,	●
ArsB transporte	PREDICTED: putative transporter arsB [Amphin	Em0007g624a	1e-170,	●
ArsB transporte	PREDICTED: putative transporter arsB [Amphin	Em0007g622a	9e-153,	●
ArsB transporte	PREDICTED: putative transporter arsB [Amphin	Em0007g629a	3e-76,	●
Silicon cotransp	natriumbicarbonate_silicic_acid_cotransporter [†	Em0012g1050a	6e-100,	●
Silicon cotransp	natriumbicarbonate_silicic_acid_cotransporter [†	Em0086g4a	2e-77,	●
Silicon cotransp	natriumbicarbonate_silicic_acid_cotransporter [†	Em0023g877a	5e-68,	●
0				
<b>Ion channels</b>				
Calcium	voltage-dependent L-type calcium channel subu	Em0001g1153a, Em0001g1240a	-234	●
		Em0001g1152a	-66	●
		Em0016g930a, Em0015g615a	-36	●
		Em0015g616a, Em0015g619a	-28	●
		Em0006g661a, Em0015g618a	-14	●
Sodium	sodium channel, voltage-gated	Em0001g1240a	-150	●
Potassium	Potassium - v-gated	Em0001g1240a	-18	●
		Em0019g967a	-18	●
		Em0001g1153a	-15	●
		Em0005g1627a	-10	●
Enac	epithelial sodium activated channel	NONE		●
CNG-HCN	cyclic nucleotide gated-hyperpolarization activat	Em0022g408a, Em0022g420a, Em0022g419a, Em0023g424a	0	●
ClC	Chloride channels	Em0008g534a	0	●
		Em0022g736a	-205	●
		Em0008g535a	-166	●
		Em0008g497a	-165	●
GIC	Glutamate gated Ion channels	NONE		●
Leak	Leak channels	Em0001g1240a	-148	●
RyR	Ryanodine Receptor	Em0014g49a, Em0015g80a, Em1035g1a	0	●
TRP	Transient receptor potential	Em0023g413a	-62	●
		Em0023g412a	-57	●
		Em0001g1088a	-51	●
		Em0023g414a	-51	●
		Em0011g571a	-51	●
		Em0023g455a	-37	●
		Em0023g456a	-34	●
		Em0017g848a	-33	●