ACPAT5 1-acylglycerol-3-phosphate O-acyltransferase 5 614796 ACPAT5 1-acylglycerol-3-phosphate O-acyltransferase 5 614796 ACPAT5 acyltransferase 5 614796 ACPAT5 acyltransferases, that catalyze the acyltation of hysophosphatic acid to phosphatic acid, the precursor of all glycerolipids (summary by Lu et al., 2005)[20] Binds to TEK/TIE2, competing for the ANCPT1 inducers, such as VEGF, ANCPT2-mediated Ioosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell apoptosis with consequent security of an employed in accell merual morphogenesis and connectivity and regulate the activity of small Rho CTPases by catalyzing the exchange factors (CEFs), which are implicitated in neural morphogenesis and connectivity and regulate the activity of sma	GENE	Full Name	OMIM	Function
AGPAT5I-acylglycerol-3- phosphate O- acyltransferase 5Gl4796AGPAT5glycerol 3-phosphate acyltransferaes (E 2.3.1.51), also known as lysophosphatidic acid to phosphatidic acid to phosphatidic acid to phosphatidic acid acyltransferases, that callyze the acylation of lysophosphatidic summary by Lu et al., 2005)[20]ANGPT2Angiopoietin 2601922Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1. In the absence of angiogenic inducers, such as VEGF, ANCPT2-mediated lossening of cell-matrix contacts may induce endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProtARHGEF10Rho guanine nucleotide exchange factor 10608136 formation and proliferation of peripheral nerves. Source: UniProtCLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCLN8CLN8 transmembrane ER and ERGIC protein60783		1-acylglycerol-3- phosphate O- acyltransferase 5	614796	AGPAT5 is a member of a family of 1-acyl-sn-
AGPAT5 phosphate O- acyltransferase 5 614796 AGPAT5 acyltransferase 5 614796 acyltransferase 5 614796 acyltransferases, that catalyze the acylation of lysophosphatidic acid to phosphatidic acid, the precursor of all glycerolipids (summary by Lu et al., 2005) [20] Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling. Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, ANGPT2-mediated lososening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProt ARHGEF10 Rho guanine nucleotide exchange factor 10 608136 factor 10 CLN8 CLN8 transmembrane ER and ERGIC protein 608136 formation and preipicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21] CLN8 CLN8 transmembrane ER and ERGIC protein 608397 CLN8 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220				glycerol 3-phosphate acyltransferases (EC 2.3.1.51),
AGPAT5 pposphate U- acyltransferase 5 614796 acyltransferases, that calalyze the acylation of lysophosphatidic acid to phosphatidic acid, the precursor of all glycerolipids (summary by Lu et al., 2005).[20] Binds to TEK/TIE2, competing for the ANGPT1 Binds to TEK/TIE2, competing for the ANGPT1 ANGPT2 Angiopoietin 2 601922 ANGPT2 Angiopoietin 2 601922 ANGPT2 Angiopoietin 2 601922 ARHGEF10 Rho guanine nucleotide exchange factor 10 In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less <i>Source: UniProt</i> MARHGEF10 Rho guanine nucleotide exchange factor 10 May play a role in developmental myelination of peripheral nerves. <i>Source: UniProt</i> CLN8 CLN8 transmembrane ER and ERGIC protein 608136 CSMD1 CUB and Sushi multiple domains 1 608397 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220				also known as lysophosphatidic acid
ANGPT2 Angiopoietin 2 601922 Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling. Can induce tryosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, ANGPT2-mediated ANGPT2 Angiopoietin 2 601922 Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT2-mediated ANGPT2 Angiopoietin 2 601922 Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT2-mediated ANGPT2 Angiopoietin 2 601922 Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT2-mediated ANGPT2 Angiopoietin 2 601922 Lossening of cell-matrix contacts may induce endothelia cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelia cell maptiton and proliferation, thus serving as a permissive angiogenic signal. Show less <i>Source: UniProt</i> ARHGEF10 Rho guanine nucleotide exchange factors (GEFs), which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by calalyzing the exchange of bound CDP by GTP (Verhoeven et al., 2003). [21] CLN8 CLN8 transmembrane ER and EKGIC protein 608397 CLN8 CLN8 transmembrane multiple domains 1 608397 CLN8 CLN8 transmembrane factors (GEFs) Fortential suppressor of squamous cell carcinomas. <i>Source: UniProt</i> CLN8	AGPAT5			acyltransferases, that catalyze the acylation of
ANGPT2 Angiopoietin 2 601922 Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling. Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of ANGPT1. In the absence of ANGPT1. In the absence of ANGPT2. In the absence of ANGPT2. In the absence of ANGPT2. In the absence of ANGPT1. In the absence of ANGPT2. The transmediated inducers, such as VEGF, ANGPT2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProt ARHGEF10 Rho guanine nucleotide exchange factors 10 ARHGEF10 Rho guanine nucleotide exchange factors (GEFs), which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21] CLN8 CLN8 transmembrane ER and ERGIC protein multiple domains 1 607837 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125200 DEFA1 Defensin alpha 1 125200				lysophosphatidic acid to phosphatidic acid, the
ANGPT2 Angiopoietin 2 601922 Binds to TEK/TIE2, competing for the ANGPT1 signaling. Can induce trosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VEGF, ANGPT2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProt ARHGEF10 Rho guanine nucleotide exchange factor 10 608136 CLN8 CLN8 transmembrane ER and ERGIC protein 608136 CLN8 CLN8 transmembrane ER and ERGIC protein 607837 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220				precursor of all glycerolipids (summary by Lu et al.,
Binds to TEK/TIE2, competing for the ANGPT1 binding site, and modulating ANGPT1 signaling. Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of angiogenic inducers, such as VECF, ANGPT2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VECF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProtARHGEF10Rho guanine nucleotide exchange factor 10608136 entry of the absence of angiogenic signal. Show less Source: UniProtCLN8CLN8 transmembrane ER and ERGIC protein608136 e07837May play a role in developmental myelination of peripheral nerves. Source: UniProtCLN8CLN8 transmembrane ER and ERGIC protein607837Cuil play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Fotential suppressor of squamous cell carcinomas. Source: UniProtDEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibiotic, funcicide activity against Gram-negative and Gram-positive bacteria. Defensin 3 have antibiotic, funcicide				2005).[20]
ANGPT2Angiopoietin 2601922binding site, and modulating ANGPT1 signaling. Can induce tyrosine phosphorylation of TES/TIE2 in the absence of ANGPT2-mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21]CLN8CLN8 transmembrane ER and ERGIC protein607837 607837May play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCLN8CUB and Sushi multiple domains 1608397Fotential suppressor of squamous cell carcinomas. Source: UniProtDEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial ativity against Gram-negative and Gram-positive asystem size for an incrediblic, fungicide attivity against Gram-negative and Biote, fungicide attivity against Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt		Angiopoietin 2	601922	Binds to TEK/TIE2, competing for the ANGPT1
ANGPT2Angiopoietin 2601922Can induce tyrosine phosphorylation of TEK/TIE2 in the absence of ANGPT1. In the absence of ANGPT2. mediated loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less <i>Source: UniProt</i> ARHGEF10Rho guanine nucleotide exchange factor 10608136ARHGEF10Rho guanine nucleotide exchange factor 10608136CLN8CLN8 transmembrane ER and ERGIC protein607837CLN8CLN8 transmembrane ER and ERGIC protein607837CSMD1CUB and Sushi multiple domains 1607837DEFA1Defensin alpha 1125220DEFA1Defensin alpha 1125220DEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-positive against cell activity against Gram-positive against cell activity against Gram-positive against cell activity against Gram-positive against cell activity against Gram-positive against cell death. Source: UniProtDEFA1Defensin alpha 1125220DEFA1Defensin alpha 1125200Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-positive bacteria. Defensin 3 have antibiotic, funcicideDEFensin 2 and defensin 3 have antibiotic, funcicide				binding site, and modulating ANGPT1 signaling.
ANGPT2 Angiopoietin 2 601922 inducers, such as VEGF, ANGPT2-mediated ANGPT2 Angiopoietin 2 601922 lossening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less <i>Source: UniProt</i> ARHGEF10 Rho guanine nucleotide exchange factor 10 608136 ARHGEF10 Rudet exchange factor 10 608136 CLN8 CLN8 transmembrane ER and ERGIC protein 607837 CLN8 CLN8 transmembrane ER and ERGIC protein 607837 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibiotic, funcicide 1252200 Defensin 1 alpha 1 125220				Can induce tyrosine phosphorylation of TEK/TIE2 in
ANGPT2 Angiopoietin 2 601922 inducers, such as VECF, ANGPT2-mediated ANGPT2 Angiopoietin 2 601922 inducers, such as VECF, ANGPT2-mediated Isosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VECF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less <i>Source: UniProt</i> ARHGEF10 Rho guanine nucleotide exchange factor 10 608136 CLN8 CLN8 transmembrane ER and ERGIC protein 607837 CLN8 CLN8 transmembrane ER and ERGIC protein 607837 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220				the absence of ANGPT1. In the absence of angiogenic
ANGPT2 Angiopoietin 2 601922 loosening of cell-matrix contacts may induce endothelial cell apoptosis with consequent vascular regression. In concert with VECF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProt ARHGEF10 Rho guanine nucleotide exchange factor 10 608136 CLN8 CLN8 transmembrane ER and ERGIC protein 607837 CLN8 CLN8 transmembrane IR and ERGIC protein 607837 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220				inducers, such as VEGF, ANGPT2-mediated
endothelial cell apoptosis with consequent vascular regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProtARHGEF10Rho guanine nucleotide exchange factor 10May play a role in developmental myelination of peripheral nerves. Source: UniProtARHGEF10Rho guanine nucleotide exchange factor 10May play a role in developmental myelination of peripheral nerves. Source: UniProtCLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Potential suppressor of squamous cell carcinomas. Source: UniProtDEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibiotic. functiola activity gathers are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProtDEFA1Defensin alpha 1125220Defensin a ethought to kill microbes by permeabilizing their plasma membrane. Source: UniProt	ANGPT2			loosening of cell-matrix contacts may induce
regression. In concert with VEGF, it may facilitate endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less <i>Source: UniProt</i> ARHGEF10Rho guanine nucleotide exchange factor 10608136 factor 10May play a role in developmental myelination of peripheral nerves. <i>Source: UniProt</i> ARHGEF10 is a member of the family of Rho guanine nucleotide exchange factors (GEFs), which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21]CLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. <i>Source: UniProt</i> CSMD1CUB and Sushi multiple domains 1608397Kraus et al. (2006) found that rat Csmd1 blocked (laternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22]DEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibiotic, functiola activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. <i>Source: UniProt</i>				endothelial cell apoptosis with consequent vascular
endothelial cell migration and proliferation, thus serving as a permissive angiogenic signal. Show less Source: UniProt ARHGEF10 Rho guanine nucleotide exchange 608136 factor 10 608136 are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GLN8 CLN8 transmembrane ER and ERGIC protein 607837 CUB and Sushi 607837 multiple domains 1 608397 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220 Defensin alpha 1 125220 Defensin alpha 1 DEFA1 Defensin alpha 1				regression. In concert with VEGF, it may facilitate
Serving as a permissive angiogenic signal. Show less Source: UniProt Source: UniProt ARHGEF10 Rho guanine nucleotide exchange factor 10 Rho guanine nucleotide exchange factor 10 608136 CLN8 CLN8 transmembrane ER and ERGIC protein CSMD1 CUB and Sushi multiple domains 1 CSMD1 CUB and Sushi multiple domains 1 DEFA1 Defensin alpha 1 DEFA1 Defen				endothelial cell migration and proliferation, thus
Source: UniProt Source: UniProt ARHGEF10 Rho guanine 608136 May play a role in developmental myelination of peripheral nerves. Source: UniProt ARHGEF10 nucleotide exchange factors (GEFs), which factors 10 ARHGEF10 is a member of the family of Rho guanine nucleotide exchange factors (GEFs), which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21] CLN8 CLN8 transmembrane ER and ERGIC protein 607837 CSMD1 CUB and Sushi multiple domains 1 608397 CSMD1 CUB and Sushi multiple domains 1 608397 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 Defensin alpha 1 125220 Defensin 3 have antibiotic. functiola				serving as a permissive angiogenic signal. Show less
ARHGEF10Rho guanine nucleotide exchange factor 10608136May play a role in developmental myelination of peripheral nerves. Source: UniProtARHGEF10nucleotide exchange factor 10608136ARHGEF10 is a member of the family of Rho guanine nucleotide exchange factors (GEFs), which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21]CLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Potential suppressor of squamous cell carcinomas. Source: UniProtDEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				Source: UniProt
ARHGEF10Rho guanine nucleotide exchange factor 10608136peripheral nerves. Source: UniProt ARHGEF10 is a member of the family of Rho guanine nucleotide exchange factors (GEFs), which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21]CLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Fotential suppressor of squamous cell carcinomas. Source: UniProtDEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt		Rho guanine nucleotide exchange factor 10	608136	May play a role in developmental myelination of
ARHGEF10Rho guanine nucleotide exchange factor 10ARHGEF10 is a member of the family of Rho guanine nucleotide exchange factors (GEFs), which are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTP asse by catalyzing the exchange of bound GDP 				peripheral nerves. Source: UniProt
ARHGEF10 nucleotide exchange factor 10 608136 Generation of the exchange factor 10 608136 are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21] CLN8 CLN8 transmembrane ER and ERGIC protein 607837 Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProt CSMD1 CUB and Sushi multiple domains 1 608397 Potential suppressor of squamous cell carcinomas. Source: UniProt Kraus et al. (2006) found that rat Csmd1 blocked classical complement pathway activation in a manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				ARHGEF10 is a member of the family of Rho
Indicidual for the indicate characterization of factor 10 are implicated in neural morphogenesis and connectivity and regulate the activity of small Rho GTPases by catalyzing the exchange of bound GDP by GTP (Verhoeven et al., 2003). [21] CLN8 CLN8 transmembrane ER and ERGIC protein 607837 Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProt CSMD1 CUB and Sushi multiple domains 1 608397 Potential suppressor of squamous cell carcinomas. Source: UniProt Kraus et al. (2006) found that rat Csmd1 blocked classical complement pathway activation in a manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeability their plasma membrane. Source: UniProt	ARHGEF10			guanine nucleotide exchange factors (GEFs), which
CLN8 CLN8 transmembrane ER and ERGIC protein 607837 Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProt CSMD1 CUB and Sushi multiple domains 1 608397 Potential suppressor of squamous cell carcinomas. Source: UniProt CSMD1 CUB and Sushi multiple domains 1 608397 Ramer comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				are implicated in neural morphogenesis and
CLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Potential suppressor of squamous cell carcinomas. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22]DEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				connectivity and regulate the activity of small Rho
CLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Potential suppressor of squamous cell carcinomas. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Kraus et al. (2006) found that rat Csmd1 blocked classical complement pathway activation in a manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22]DEFA1Defensin alpha 1125220Defensin 3 and defensin 2 have antibiotic. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				GTPases by catalyzing the exchange of bound GDP
CLN8CLN8 transmembrane ER and ERGIC protein607837Could play a role in cell proliferation during neuronal differentiation and in protection against cell death. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Potential suppressor of squamous cell carcinomas. Source: UniProtCSMD1CUB and Sushi multiple domains 1608397Ranner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22]DEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				by GTP (Verhoeven et al., 2003). [21]
CLN8 ER and ERGIC protein 607837 neuronal differentiation and in protection against cell death. Source: UniProt CSMD1 CUB and Sushi multiple domains 1 608397 Potential suppressor of squamous cell carcinomas. Source: UniProt Kraus et al. (2006) found that rat Csmd1 blocked classical complement pathway activation in a manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt		CLN8 transmembrane ER and ERGIC protein	607837	Could play a role in cell proliferation during
CSMD1 CUB and Sushi multiple domains 1 608397 Potential suppressor of squamous cell carcinomas. Source: UniProt CSMD1 CUB and Sushi multiple domains 1 608397 Kraus et al. (2006) found that rat Csmd1 blocked 	CLN8			neuronal differentiation and in protection against cell
CSMD1 CUB and Sushi multiple domains 1 608397 Kraus et al. (2006) found that rat Csmd1 blocked classical complement pathway activation in a manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				death. Source: UniProt
CSMD1 CUB and Sushi multiple domains 1 608397 Kraus et al. (2006) found that rat Csmd1 blocked classical complement pathway activation in a manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt		CUB and Sushi multiple domains 1	608397	Potential suppressor of squamous cell carcinomas.
CSMD1 CUB and Sushi 608397 Generative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 Wasser and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 Defensin 2 have antibiotice by permeabilizing their plasma membrane. Source: UniProt UniProt Defensin 3 have antibiotic, fungicide				Source: UniProt
CSMD1CUB and Sushi multiple domains 1608397manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22]DEFA1Defensin alpha 1125220Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProtDefensin 2 and defensin 3 have antibiotic, fungicide	CSMD1			Kraus et al. (2006) found that rat Csmd1 blocked
CSMD1 COB and Sushi 608397 manner comparable to rat Crry, but it did not block alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt Defensin 2 and defensin 3 have antibiotic, fungicide Defensin 3 have antibiotic, fungicide				classical complement pathway activation in a
multiple domains 1 alternative pathway activation. In situ hybridization and neuron immunolabeling showed that Csmd1 was synthesized in the developing central nervous system and in epithelial tissues, with particular enrichment in the nerve growth cone.[22] DEFA1 Defensin alpha 1 125220 Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt Defensin 2 and defensin 3 have antibiotic, fungicide				manner comparable to rat Crry, but it did not block
DEFA1 Defensin alpha 1 125220 125220 Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				and neuron immunoloholing choused that Comd1
DEFA1 Defensin alpha 1 125220 Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				was supposed in the developing control pervous
DEFA1 Defensin alpha 1 125220 Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt				was synthesized in the developing central hervous
DEFA1 Defensin alpha 1 125220 Defensins are thought to kill microbes by permeabilizing their plasma membrane. Source: UniProt Defensin 2 and defensin 3 have antibiotic, fungicide Defensin 2 and defensin 3 have antibiotic, fungicide				system and in epimenal dissues, with particular
DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 Defensin alpha 1 125220 Defensin 2 nate defensin 2 nate antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram-negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. <i>Source:</i> <i>UniProt</i> Defensin 2 nate defensin 2 nate antibiotic, fungicide				Defension 1 and defension 2 have antihectorial
DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 DEFA1 Defensin alpha 1 125220 Defensins are thought to kill microbes by permeabilizing their plasma membrane. <i>Source:</i> <i>UniProt</i> Defensin 2 and defensin 3 have antibiotic, fungicide	DEFA1	Defensin alpha 1	125220	functional antivital activities. Has antimicrobial
DEFA1 Defensin alpha 1 125220 activity against Grain-negative and Grain-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane. <i>Source:</i> <u>UniProt</u> Defensin 2 and defensin 3 have antibiotic, fungicide				activity against Cram pagative and Cram positive
permeabilizing their plasma membrane. <i>Source:</i> <u>UniProt</u> Defensin 2 and defensin 3 have antibiotic, fungicide				bacteria. Defensing are thought to kill microhes by
Defensin 2 and defensin 3 have antibiotic, fungicide				pormospilizing their plasma membrane. Source:
Defensin 2 and defensin 3 have antibiotic, fungicide				Permeabilizing then plasma memorane. Source. HuiDrot
D CICIDIT 2 AND UCICIDIT 3 HAVE AND DUUC, TUTPICIUE	DEFA3	Defensin alpha 3	604522	Defensin 2 and defensin 3 have antibiotic fungicide
DEFA3 Defensin alpha 3 604522 and antiviral activities. Has antimicrobial activity				and antiviral activities. Has antimicrohial activity
against Gram-negative and Gram-nositive bacteria				against Gram-negative and Gram-positive bacteria

Table S1. Full name, OMIM code and function of genes whose loci are harbored within the 8p23.3p23.1 sub-bands, between nucleotidis 221,611 and 6,914,076 of around.

			Defensins are thought to kill microbes by permeabilizing their plasma membrane. <i>Source:</i>
			UniProt
			Has antimicrobial activity against Gram-negative
	Defensin alpha 4	601157	bacteria, and to a lesser extent also against Gram-
DFFA4			positive bacteria and fungi. Protects blood cells
DEIA4			against infection with HIV-1 (in vitro). Inhibits
			corticotropin (ACTH)-stimulated corticosterone
			production. Source: UniProt
	Defensin alpha 5	600472	Has antimicrobial activity against Gram-negative
			and Gram-positive bacteria. Detensins are thought to
DEFA5			kill microbes by permeabilizing their plasma
			membrane. All DEFA5 peptides exert antimicrobial
			activities, but their potency is affected by peptide
			Has very low antimicrobial activity against Cram-
DFFA6	Defensin alpha 6	600471	negative and Gram-positive bacteria. May protect
DEITIO			cells against infection with HIV-1 Source: UniProt
	Defensin beta 1	602056	Has bactericidal activity. May act as a ligand for C-C
			chemokine receptor CCR6. Positively regulates the
DEED			sperm motility and bactericidal activity in a CCR6-
DEFRI			dependent manner. Binds to CCR6 and triggers Ca2+
			mobilization in the sperm which is important for its
			motility (PubMedShow more Source: UniProt
	DLG associated protein 2	605438	May play a role in the molecular organization of
			synapses and neuronal cell signaling. Could be an
DLGAP2			adapter protein linking ion channel to the
			subsynaptic cytoskeleton. May induce enrichment of
			PSD-95/SAP90 at the plasma membrane. <i>Source:</i>
	DLG associated protein 2	605438	in Lore densities the PCD 05 (CA DOD markets) (DL CA
EDICUL ACL			(02887) which in turn interacts with Shaker turn
ERICHI-ASI			bozoo7), which in turn interacts with Shaker-type
			and clusters with these at synaptic junctions [23]
			Substrate-recognition component of the SCF (SKP1-
	f-box protein 25	609098	CUL1-F-box protein)-type E3 ubiquitin ligase
FBXO25			complex. May play a role in accumulation of
			expanded polyglutamine (polyQ) protein huntingtin
			(HTT) (By similarity). Source: UniProt
	Microcephalin 1	607117	Implicated in chromosome condensation and DNA
			damage induced cellular responses. May play a role
MCFHI			in neurogenesis and regulation of the size of the
			cerebral cortex. Source: UniProt
	Myomesin 2	603509	Major component of the vertebrate myofibrillar M
MYOM2			band. Binds myosin, titin, and light meromyosin.
			This binding is dose dependent. Source: UniProt