

New nomenclature Adhesion-GPCRs

April 22, 2015

Subfamily	Gene name	Former gene name	Protein name (abbreviated)	Protein name (full out)	Comments (eg, restriction to species)	Reference (PMID)	
I_ADGRL Latrophilin-like	<b>ADGRL1</b>	LPHN1	<b>Latrophilin 1</b>	Latrophilin 1		Davletov, J Biol Chem (8798521)	
			<b>CIRL1</b>	Calcium-independent receptor of $\alpha$ -latrotoxin 1		Krasnoperov, Biochem Biophys Res Commun 1996 (8886023)	
			<b>CL1</b>	CIRL/latrophilin 1		Sugita, J Biol Chem 1998 (9830014)	
			LEC2	Lectomedin-2		Hayflick, J Recept Signal Transduct Res 2000 (10994649)	
			CIRL (CG8639)	Calcium-independent receptor of $\alpha$ -latrotoxin	D. melanogaster	Lloyd, Neuron 2000 (10798391)	
			LAT-1 (B0457.1)	Latrophilin-1	C. elegans	Mastwal and Hedgecock, International C. elegans Meeting 2001	
	<b>ADGRL2</b>	LPHN2	<b>Latrophilin 2</b>	Latrophilin 2		Matsushita, FEBS Lett 1999 (10025961)	
			<b>CIRL-2</b>	Calcium-independent receptor of $\alpha$ -latrotoxin 2		Ichtchenko, J Biol Chem 1999 (10026162)	
			<b>CL2</b>	CIRL/latrophilin 2		Sugita, J Biol Chem 1998 (9830014)	
			LPHH1	Latrophilin homologue in humans 1	Human	White, Oncogene 1998 (10030676)	
			LEC1	Lectomedin-1		Hayflick, J Recept Signal Transduct Res 2000 (10994649)	
			LAT-2 (B0286.2)	Latrophilin-2	C. elegans	Mastwal and Hedgecock, International C. elegans Meeting 2001	
	<b>ADGRL3</b>	LPHN3	<b>Latrophilin 3</b>	Latrophilin 3		Matsushita, FEBS Lett 1999, PMID 10025961	
			<b>CIRL-3</b>	Calcium-independent receptor of $\alpha$ -latrotoxin 3		Ichtchenko, J Biol Chem 1999 (10026162)	
			<b>CL3</b>	CIRL/latrophilin 3		Sugita, J Biol Chem 1998 (9830014)	
			LEC3	Lectomedin-3		Hayflick, J Recept Signal Transduct Res 2000 (10994649)	
	<b>ADGRL4</b>	ELTD1	<b>ETL</b>	EGF-TM7-latrophilin-related protein		Note that <i>ETL-1</i> is the enhancer trap locus-1 gene!	
			<b>ELTD1</b>	EGF, latrophilin and seven trans-membrane domain-containing protein 1			
	II_ADGRE EGF-TM7	<b>ADGRE1</b>	EMR1	F4/80		Mouse	Austyn, Eur J Immunol 1981 (7308288)
				<b>EMR1</b>	EGF-like molecule containing mucin-like hormone receptor 1		Baud, Genomics 1995 (7601460)
<b>ADGRE2</b>		EMR2	<b>EMR2</b>	EGF-like molecule containing mucin-like hormone receptor 2	Absent in murids	Lin, Genomics 2000 (10903844)	
			CD312	Cluster of differentiation 312		Leukocyte Typing VIII 2004 (www.hcdm.org)	
<b>ADGRE3</b>		EMR3	<b>EMR3</b>	EGF-like molecule containing mucin-like hormone	Absent in murids	Stacey, J Biol Chem 2001 (11279179)	

			receptor 3		
	<b>ADGRE4</b>	EMR4	FIRE	F4/80-like receptor	Mouse Caminschi, J Immunol 2001 (1564768)
			<b>EMR4</b>	EGF-like molecule containing mucin-like hormone receptor 4	Pseudogen in humans Stacey, J Biol Chem 2002 (12023293)
			GPR127	G protein-coupled receptor 127	Frederiksson, Biochem Biophys Res Commun 2003 (12565841)
	<b>ADGRE5</b>	CD97	BL-Ac(F2)		Human Eichler, Scand J Immunol 1994 (8290889)
			<b>CD97</b>	Cluster of differentiation 97	Leukocyte Typing V 1994 (www.hcdm.org)
III_ADGRA	<b>ADGRA1</b>	GPR123	<b>GPR123</b>	G protein-coupled receptor 123	Frederiksson, Biochem Biophys Res Commun 2003 (12565841)
	<b>ADGRA2</b>	GPR124	TEM5	Tumor endothelial marker 5	Carson-Walter, Cancer Res 2001 (11559528)
			<b>GPR124</b>	G protein-coupled receptor 124	Frederiksson, Biochem Biophys Res Commun 2003 (12565841)
	<b>ADGRA3</b>	GPR125	<b>GPR125</b>	G protein-coupled receptor 125	Frederiksson, Biochem Biophys Res Commun 2003 (12565841)
IV_ADGRC CELSR-like	<b>ADGRC1</b>	<b>CELSR1</b>	<b>CELSR1</b>	Cadherin EGF LAG seven-pass G-type receptor 1	Hadjantonakis, Genomics 1997 (9339365)
	<b>ADGRC2</b>	<b>CELSR2</b>	<b>CELSR2</b>	Cadherin EGF LAG seven-pass G-type receptor 2	Formstone, Mamm Genome 2000 (10790539)
			Fmi	Flamingo	D. melanogaster, mouse Usui, Cell 1999 (10490098); Sugimura, Cell 2012 (22817897)
			Stan	Starry night	D. melanogaster Chae, Development 1999 (10556066)
			MEGF3	Multiple epidermal growth factor-like domains 3	Rat Nakayama, Genomics 1998 (9693030)
	<b>ADGRC3</b>	<b>CELSR3</b>	<b>CELSR3</b>	Cadherin EGF LAG seven-pass G-type receptor 3	Formstone, Mamm Genome 2000 (10790539)
			MEGF2	Multiple epidermal growth factor-like domains 2	Rat Nakayama, Genomics 1998 (9693030)
			Fmi1	Flamingo1	Mouse Usui, Cell 1999 (10490098)
			EGFL1	Epidermal growth factor-like 1	Human Vincent, DNA Res 2000 (10907856)
V_ADGRD	<b>ADGRD1</b>	GPR133	<b>GPR133</b>	G protein-coupled receptor 133	Bjarnadóttir, Genomics 2004 (15203201)
	<b>ADGRD2</b>	GPR144	<b>GPR144</b>	G protein-coupled receptor 144	Bjarnadóttir, Genomics 2004 (15203201)
VI_ADGRF	<b>ADGRF1</b>	GPR110	<b>GPR110</b>	G protein-coupled receptor 110	Frederiksson, FEBS Lett 2002 (12435584)
	<b>ADGRF2</b>	GPR111	<b>GPR111</b>	G protein-coupled receptor 111	Frederiksson, FEBS Lett 2002 (12435584)
	<b>ADGRF3</b>	GPR113	<b>GPR113</b>	G protein-coupled receptor 113	Frederiksson, FEBS Lett 2002 (12435584)
	<b>ADGRF4</b>	GPR115	<b>GPR115</b>	G protein-coupled receptor 115	Frederiksson, FEBS Lett 2002 (12435584)
	<b>ADGRF5</b>	GPR116	Ig-Hepta		Abe, J Biol Chem 1999 (10391944)
			<b>GPR116</b>	G protein-coupled receptor 116	Frederiksson, FEBS Lett 2002 (12435584)
VII_ADGRB BAI-like	<b>ADGRB1</b>	BAI1	<b>BAI1</b>	Brain-specific angiogenesis inhibitor 1	Nishimori, Oncogene 1997 (9393972)
	<b>ADGRB2</b>	BAI2	<b>BAI2</b>	Brain-specific angiogenesis inhibitor 2	Shiratsuchi, Cytogenet Cell Genet 1997 (9533023)
	<b>ADGRB3</b>	BAI3	<b>BAI3</b>	Brain-specific angiogenesis	Shiratsuchi, Cytogenet Cell Genet 1997

				inhibitor 3		(9533023)
VIII_ADGRG	<b>ADGRG1</b>	GPR56	<b>GPR56</b>	G protein-coupled receptor 56		Liu, Genomics 1999 (10049584)
			TM7XN1			Zendman, FEBS Lett 1999 (10100861)
	<b>ADGRG2</b>	GPR64	<b>GPR64</b>	G protein-coupled receptor 64		Obermann, Mol Reprod Dev (12420295)
			HE6	Human epididymal 6		Osterhoff, DNA Cell Biol 1997 (9150425)
	<b>ADGRG3</b>	GPR97	<b>GPR97</b>	G protein-coupled receptor 97		Frederiksson, FEBS Lett 2002 (12435584)
			Pb99			Schleckman, Mol Cell Biol 2000 (10825203)
	<b>ADGRG4</b>	GPR112	<b>GPR112</b>	G protein-coupled receptor 112		Frederiksson, FEBS Lett 2002 (12435584)
	<b>ADGRG5</b>	GPR114	<b>GPR114</b>	G protein-coupled receptor 114		Frederiksson, FEBS Lett 2002 (12435584)
	<b>ADGRG6</b>	GPR126	<b>GPR126</b>	G protein-coupled receptor 126		Frederiksson, Biochem Biophys Res Commun 2003 (12565841)
			VIGR	Vascular inducible GPCR	Human	Stehlik, FEBS Lett 2004 (15225624)
DREG			Developmentally regulated G-protein-coupled receptor		Moriguchi, Genes Cells 2004 (15189448)	
<b>ADGRG7</b>	GPR128	<b>GPR128</b>	G protein-coupled receptor 128		Frederiksson, Biochem Biophys Res Commun 2003 (12565841)	
IX_ADGRV	<b>ADGRV1</b>	GPR98	<b>VLGR1</b>	Very large G protein-coupled receptor 1	Several splice variants, eg VLGR1a, b	Nikkila, Mol Endocrinol 2000 (10976914)
			<b>GPR98</b>	G protein-coupled receptor 98		Jacobson, Hum Mol Genet 2008 (18463160)
			MASS1	Monogenic audiogenic seizure susceptibility 1	Splice variants of VLGR1 (extra-cellular part) mapping to MASS1 disease locus	Skradski, Genomics 1998 (9598305)
			USH2C	Usher syndrome type-2C/VLGR1b	Usher syndrome II locus on 5q14-q21	Pieke-Dahl, J Med Genet 2000 (10745043)
			FEB4	Febrile seizures gene disease locus 4	Febrile seizure locus on 5q14-q15	Nakayama, Hum Mol Genet 2000 (10587582)

Official gene names are provided in **red**. These names have been accepted by HGNC in February 2015, based on a new nomenclature co-developed the AGC and NC-IUPHAR. Protein names provided in **red** are currently used, sometimes in parallel; in April 2013, the AGC recommended the usage of the names shown here in **red**. For details see Hamann et al., Pharmacol Rev. 2015 Apr;67(2):338-67.

PS: The official gene names for subfamily IV\_ADGRG are still under discussion