



Nucleotide

GenBank

Homo sapiens adhesion G protein-coupled receptor A1 (ADGRA1), transcript variant 1, mRNA

NCBI Reference Sequence: NM_001083909.3

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LOCUS	NM_001083909	4264 bp	mRNA	linear	PRI 28-DEC-2022
DEFINITION	Homo sapiens adhesion G protein-coupled receptor A1 (ADGRA1), transcript variant 1, mRNA.				
ACCESSION	NM_001083909				
VERSION	NM_001083909.3				
KEYWORDS	RefSeq; MANE Select.				
SOURCE	Homo sapiens (human)				
ORGANISM	Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Haplorrhini; Catarrhini; Hominidae; Homo.				
REFERENCE	1 (bases 1 to 4264)				
AUTHORS	Liu Y, Wang G, Cui T and Lv L.				
TITLE	Adhesion GPR123 is an indicator for recurrence and prognosis in bladder cancer				
JOURNAL	Genes Genomics 43 (11), 1317-1325 (2021)				
PUBMED	33945147				
REMARK	GeneRIF: Adhesion GPR123 is an indicator for recurrence and prognosis in bladder cancer.				
REFERENCE	2 (bases 1 to 4264)				
AUTHORS	Hamann J, Aust G, Arac D, Engel FB, Formstone C, Fredriksson R, Hall RA, Harty BL, Kirchhoff C, Knapp B, Krishnan A, Liebscher I, Lin HH, Martinelli DC, Monk KR, Peeters MC, Piao X, Promel S, Schoneberg T, Schwartz TW, Singer K, Stacey M, Ushkaryov YA, Vallon M, Wolfrum U, Wright MW, Xu L, Langenhan T and Schioth HB.				
TITLE	International Union of Basic and Clinical Pharmacology. XCIV. Adhesion G protein-coupled receptors				
JOURNAL	Pharmacol Rev 67 (2), 338-367 (2015)				
PUBMED	25713288				
REMARK	Review article				
REFERENCE	3 (bases 1 to 4264)				
AUTHORS	Mills JD, Kavanagh T, Kim WS, Chen BJ, Kawahara Y, Halliday GM and Janitz M.				
TITLE	Unique transcriptome patterns of the white and grey matter corroborate structural and functional heterogeneity in the human frontal lobe				
JOURNAL	PLoS One 8 (10), e78480 (2013)				
PUBMED	24194939				
REMARK	Publication Status: Online-Only				
REFERENCE	4 (bases 1 to 4264)				
AUTHORS	Tremblay K, Lemire M, Potvin C, Tremblay A, Hunninghake GM, Raby BA, Hudson TJ, Perez-Iratxeta C, Andrade-Navarro MA and Laprise C.				
TITLE	Genes to diseases (G2D) computational method to identify asthma candidate genes				
JOURNAL	PLoS One 3 (8), e2907 (2008)				
PUBMED	18682798				
REMARK	GeneRIF: Observational study of gene-disease association. (HuGE Navigator) Publication Status: Online-Only				
REFERENCE	5 (bases 1 to 4264)				
AUTHORS	Lagerstrom MC, Rabe N, Haitina T, Kalnina I, Hellstrom AR, Klovins J, Kullander K and Schioth HB.				
TITLE	The evolutionary history and tissue mapping of GPR123: specific CNS				

expression pattern predominantly in thalamic nuclei and regions containing large pyramidal cells

JOURNAL J Neurochem 100 (4), 1129-1142 (2007)

PUBMED [17212699](#)

REMARK GeneRIF: Studies indicate that the orthologs of GP123 in mouse and rat play a role in the regulation of neuronal signaling pathways.

REFERENCE 6 (bases 1 to 4264)

AUTHORS Bjarnadottir TK, Geirardsdottir K, Ingemansson M, Mirza MA, Fredriksson R and Schioth HB.

TITLE Identification of novel splice variants of Adhesion G protein-coupled receptors

JOURNAL Gene 387 (1-2), 38-48 (2007)

PUBMED [17056209](#)

REFERENCE 7 (bases 1 to 4264)

AUTHORS Bjarnadottir TK, Fredriksson R, Hoglund PJ, Gloriam DE, Lagerstrom MC and Schioth HB.

TITLE The human and mouse repertoire of the adhesion family of G-protein-coupled receptors

JOURNAL Genomics 84 (1), 23-33 (2004)

PUBMED [15203201](#)

REFERENCE 8 (bases 1 to 4264)

AUTHORS Deloukas P, Earthworm ME, Grafham DV, Rubenfield M, French L, Steward CA, Sims SK, Jones MC, Searle S, Scott C, Howe K, Hunt SE, Andrews TD, Gilbert JG, Swarbreck D, Ashurst JL, Taylor A, Battles J, Bird CP, Ainscough R, Almeida JP, Ashwell RI, Ambrose KD, Babbage AK, Baguley CL, Bailey J, Banerjee R, Bates K, Beasley H, Bray-Allen S, Brown AJ, Brown JY, Burford DC, Burrill W, Burton J, Cahill P, Camire D, Carter NP, Chapman JC, Clark SY, Clarke G, Clee CM, Clegg S, Corby N, Coulson A, Dhali P, Dutta I, Dunn M, Faulkner L, Frankish A, Frankland JA, Garner P, Garnett J, Gribble S, Griffiths C, Grocock R, Gustafson E, Hammond S, Harley JL, Hart E, Heath PD, Ho TP, Hopkins B, Horne J, Howden PJ, Huckle E, Hynds C, Johnson C, Johnson D, Kana A, Kay M, Kimberley AM, Kershaw JK, Kokkinaki M, Laird GK, Lawlor S, Lee HM, Leongamornlert DA, Laird G, Lloyd C, Lloyd DM, Loveland J, Lovell J, McLaren S, McLay KE, McMurray A, Mashregi-Mohammadi M, Matthews L, Milne S, Nickerson T, Nguyen M, Overton-Larty E, Palmer SA, Pearce AV, Peck AI, Pelan S, Phillimore B, Porter K, Rice CM, Rogosin A, Ross MT, Sarafidou T, Sehra HK, Shownkeen R, Skuce CD, Smith M, Standring L, Sycamore N, Tester J, Thorpe A, Torcasso W, Tracey A, Tromans A, Tsolas J, Wall M, Walsh J, Wang H, Weinstock K, West AP, Willey DL, Whitehead SL, Wilming L, Wray PW, Young L, Chen Y, Lovering RC, Moschonas NK, Siebert R, Fechtel K, Bentley D, Durbin R, Hubbard T, Doucette-Stamm L, Beck S, Smith DR and Rogers J.

TITLE The DNA sequence and comparative analysis of human chromosome 10

JOURNAL Nature 429 (6990), 375-381 (2004)

PUBMED [15164054](#)

REFERENCE 9 (bases 1 to 4264)

AUTHORS Vassilatis DK, Hohmann JG, Zeng H, Li F, Ranchalis JE, Mortrud MT, Brown A, Rodriguez SS, Weller JR, Wright AC, Bergmann JE and Gaitanaris GA.

TITLE The G protein-coupled receptor repertoires of human and mouse

JOURNAL Proc Natl Acad Sci U S A 100 (8), 4903-4908 (2003)

PUBMED [12679517](#)

REFERENCE 10 (bases 1 to 4264)

AUTHORS Fredriksson R, Gloriam DE, Hoglund PJ, Lagerstrom MC and Schioth HB.

TITLE There exist at least 30 human G-protein-coupled receptors with long Ser/Thr-rich N-termini

JOURNAL Biochem Biophys Res Commun 301 (3), 725-734 (2003)

PUBMED [12565841](#)

COMMENT REVIEWED [REFSEQ](#): This record has been curated by NCBI staff. The reference sequence was derived from [AL445199.37](#), [DA208698.1](#), [EF536972.1](#) and [BC044247.1](#). This sequence is a reference standard in the [RefSeqGene](#) project.

On Nov 30, 2019 this sequence version replaced [NM_001083909.2](#).

Summary: This gene encodes a protein that belongs to the adhesion family of G-protein-coupled receptors. Members of this family function in several sensory systems and regulate blood pressure, immune responses, food intake and development. A similar protein in rodents is thought to play a role in the regulation of neuronal signaling pathways. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. [provided

by RefSeq, Mar 2014].

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).

Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.

Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Gene record to access additional publications.

##Evidence-Data-START##
Transcript exon combination :: SRR14038193.3627836.1,
SRR14372080.3602197.1 [ECO:0000332]
RNAseq introns :: single sample supports all introns
SAMEA2154665 [ECO:0000348]
##Evidence-Data-END##

##RefSeq-Attributes-START##
MANE Ensembl match :: ENST00000392607.8/ ENSP00000376384.3
RefSeq Select criteria :: based on manual assertion, conservation,
expression, longest protein
##RefSeq-Attributes-END##

COMPLETENESS: complete on the 3' end.

PRIMARY	REFSEQ_SPAN	PRIMARY_IDENTIFIER	PRIMARY_SPAN	COMP
	1-80	AL445199.37	57007-57086	
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	292-2142	EF536972.1	1-1851	
	2143-3931	AL445199.37	98637-100425	
	3932-4264	BC044247.1	1638-1970	

FEATURES

Location/Qualifiers

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/chromosome="10"

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gene

1..4264

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/note="adhesion G protein-coupled receptor A1"

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/db_xref="HGNC:HGNC:13838"

/db_xref="MIM:612302"

exon

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misc feature

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CDS

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probable G-protein coupled receptor 123"

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TADEAHVHLQEEGAFGHDPHLHGCLQGRTKPPYFSRHPAEEPEYAYHIPSSLDGSPRS
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/ gene_synonym="GPR123"
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transmembrane region"

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transmembrane region"

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transmembrane region"

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ORIGIN

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