

GPCR MRGE/GPCR GPR167 Rabbit pAb

Catalog # AP99678

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q86SM8
Other Accession	Q86SM8
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34286
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GPCR MRGE/GPCR GPR167
Epitope Specificity	51-150/312
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family. Mas subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	MRGE is a 311 amino acid multi-pass membrane protein that acts as an orphan receptor and is thought to influence nociceptor function. A member of the G-protein coupled receptor 1 family and MAS subfamily, MRGE is encoded by a gene that maps to human chromosome 11p15.4 and mouse chromosome 7 F5. Chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

Additional Information

Gene ID	116534
Other Names	GPR167; MGRF; MRGE; C130069N09Rik; Ebtr3; MRGRE_HUMAN; MRGPPE; G-protein coupled receptor 167; MRGRE_MOUSE; Evolutionary breakpoint transcript 3 protein; MRGRE_RAT;
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500 0-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	MRGPRES {ECO:0000303 PubMed:40446798, ECO:0000312 HGNC:HGNC:30694}
Function	G protein-coupled receptor for L-tryptophanocholate (Trp-CA), an amino-acid-conjugated bile acid produced by the microbiome, which regulates glucose homeostasis (PubMed: 40446798). Expressed in enteroendocrine L cells of the gut epithelium: Trp-CA binding causes a conformation change that triggers signaling via G(s) G protein, mediating activation of adenylate cyclase activity (PubMed: 40446798). In addition to G(s), MRGPRES also associates with beta-arrestin-1 (ARRB1), promoting phosphorylation of ALDOA (PubMed: 40446798). Both G(s) and beta-arrestin-1 signaling pathways improves glucose tolerance by enhancing GLP-1 secretion (PubMed: 40446798).
Cellular Location	Cell membrane; Multi-pass membrane protein

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.