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GPR34 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12840C

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UPC5
Other Accession	Q9R1K6, NP_001091048.1
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32575
Calculated MW	43860
Antigen Region	232-261

Additional Information

Gene ID	2857
Other Names	Probable G-protein coupled receptor 34, GPR34
Target/Specificity	This GPR34 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 232-261 amino acids from the Central region of human GPR34.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GPR34 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GPR34
Function	G-protein-coupled receptor of lysophosphatidylserine (LysoPS) that plays different roles in immune response (PubMed:16460680). Acts a damage-sensing receptor that triggers tissue repair upon recognition of dying

	neutrophils (By similarity). Mechanistically, apoptotic neutrophils release lysophosphatydilserine that are recognized by type 3 innate lymphoid cells (ILC3s) via GPR34, which activates downstream PI3K-AKT and RAS-ERK signaling pathways leading to STAT3 activation and IL-22 production (By similarity). Plays an important role in microglial function, controlling morphology and phagocytosis (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Broadly expressed. Highly expressed on mast cells (PubMed:16460680).

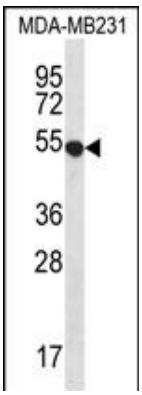
Background

G protein-coupled receptors (GPCRs), such as GPR34, are integral membrane proteins containing 7 putative transmembrane domains (TMs). These proteins mediate signals to the interior of the cell via activation of heterotrimeric G proteins that in turn activate various effector proteins, ultimately resulting in a physiologic response.

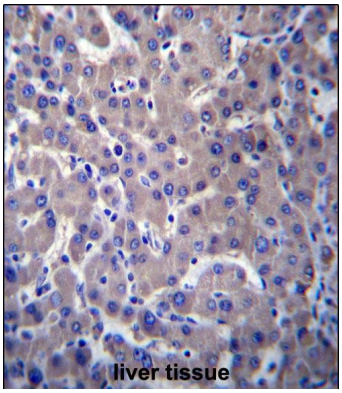
References

Engemaier, E., et al. Genomics 87(2):254-264(2006)
Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)
Jacobi, F.K., et al. Hum. Genet. 107(1):89-91(2000)
Schoneberg, T., et al. Biochim. Biophys. Acta 1446 (1-2), 57-70 (1999) :
Marchese, A., et al. Genomics 56(1):12-21(1999)

Images



GPR34 Antibody (Center) (Cat. #AP12840c) western blot analysis in MDA-MB231 cell line lysates (35ug/lane).This demonstrates the GPR34 antibody detected the GPR34 protein (arrow).



GPR34 Antibody (Center) (Cat. #AP12840c)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GPR34 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Topogenesis and cell surface trafficking of GPR34 are facilitated by positive-inside rule that effects through a tri-basic motif in the first intracellular loop.