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GPR45 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12248c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9Y5Y3
Other Accession	Q9EQQ4, NP_009158.3
Reactivity	Human, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32265
Calculated MW	41967
Antigen Region	121-149

Additional Information

Gene ID	11250
Other Names	Probable G-protein coupled receptor 45, PSP24-1, PSP24-alpha, GPR45
Target/Specificity	This GPR45 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 121-149 amino acids from the Central region of human GPR45.
Dilution	WB~~1:2000 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	GPR45 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GPR45 {ECO:0000303|PubMed:10036181, ECO:0000312|HGNC:HGNC:4503}
Function	Protein carrier that acts as a regulator of food intake in the paraventricular nucleus of the hypothalamus (PVH) by mediating transport of G(s) into primary cilia (By similarity). Transported into primary cilia of PVH neurons via

	its association with TULP3 and carries G(s) into the primary cilia to support MC4R activity and activate ADCY3, leading to cAMP production, which signals to suppress appetite (By similarity). Does not act as a canonical G protein-coupled receptor: does not promote the exchange of GDP for GTP on G(s) protein but mediates G(s) translocation into primary cilia (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q9EQQ4}; Multi-pass membrane protein. Cell projection, cilium membrane {ECO:0000250|UniProtKB:Q9EQQ4}; Multi-pass membrane protein
Tissue Location	Expressed in brain; detected in the basal forebrain, frontal cortex, and caudate, but not in thalamus, hippocampus, or putamen.

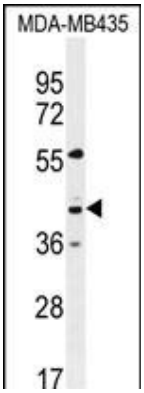
Background

This intronless gene encodes a member of the G protein-coupled receptor (GPCR) family. Members of this protein family contain seven putative transmembrane domains and may mediate signaling processes to the interior of the cell via activation of heterotrimeric G proteins. This protein may function in the central nervous system.

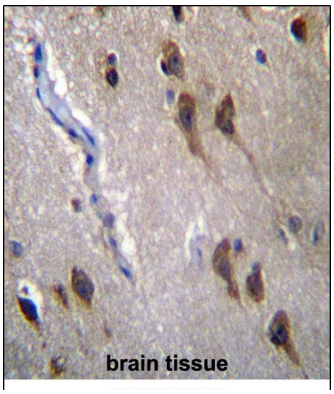
References

Salonen, J.T., et al. Am. J. Hum. Genet. 81(2):338-345(2007) Wu, C., et al. Proteomics 7(11):1775-1785(2007) Hillier, L.W., et al. Nature 434(7034):724-731(2005) Kawasawa, Y., et al. Biochem. Biophys. Res. Commun. 276(3):957-964(2000) Kawasawa, Y., et al. Biochem. Biophys. Res. Commun. 276(3):952-956(2000)

Images



GPR45 Antibody (Center) (Cat. #AP12248c) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the GPR45 antibody detected the GPR45 protein (arrow).



GPR45 Antibdy (Center) (Cat. #AP12248c)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GPR45 Antibdy (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

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