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Anti-GPR83 Antibody

Catalog # AP95844

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	Q9NYM4
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	48339

Additional Information

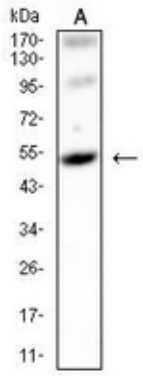
Gene ID	10888
Other Names	GPR72; KIAA1540; Probable G-protein coupled receptor 83; G-protein coupled receptor 72
Target/Specificity	Recombinant fusion protein of human GPR83 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200) IF/IC~~N/A
Format	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

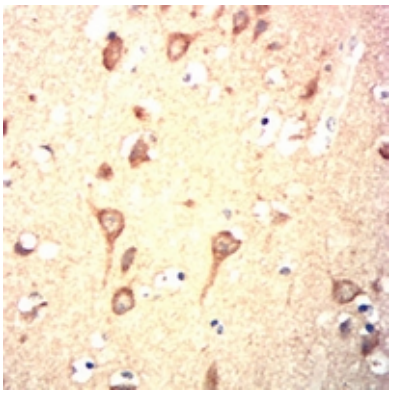
Name	GPR83 (HGNC:4523)
Function	G protein-coupled peptide receptor (PubMed: 27117253, PubMed:37689599). Several peptides, PEN, derived from the proSAAS precursor (encoded by PCSK1N), the procholecystokinin-derived peptide proCCK56-63, and the related proteins FAM237A and FAM237B have been reported to activate GPR83 through GNAI1/G(i) and GNAS/G(s)-mediated signaling pathways (PubMed:27117253, PubMed:32713278, PubMed:36853120, PubMed:37689599). However, due to conflicting evidence about the ability of these peptides to bind to and activate the GPR83, the endogenous ligand of GPR83 still remains uncertain (PubMed:36853120, PubMed:37894796). Plays a role in food intake and body weight regulation. May contribute to the regulation of anxiety-related behaviors (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P30731}; Multi-pass membrane protein. Note=Colocalizes with GPR171 in the paraventricular nucleus. Colocalizes with the ghrelin receptor GHSR1A in the hypothalamus. {ECO:0000250|UniProtKB:P30731}

Tissue Location	Highly expressed in the brain and spinal cord, and found in lower concentrations in the thymus and other tissues

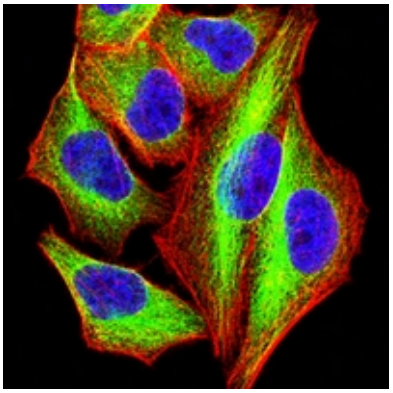
Images



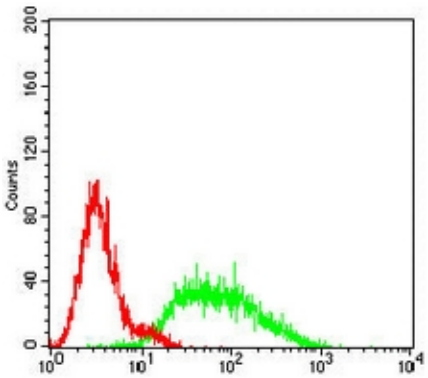
Western blot analysis of GPR83 expression in mouse brain (A) whole cell lysates. (Predicted band size: 48 kD; Observed band size: 50 kD)



Immunohistochemical analysis of GPR83 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GPR83 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of HT29 cells using Anti-GPR83 Antibody (green) and negative control (red).

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