

GFRAL Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11069B

Product Information

Application WB, IHC-P, FC, E

Primary Accession Q6UXV0 Other Accession NP 997293.2 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB28881 Calculated MW 44518 366-394 **Antigen Region**

Additional Information

Gene ID 389400

Other Names GDNF family receptor alpha-like, GFRAL, C6orf144

Target/Specificity This GFRAL antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 366-394 amino acids from the

C-terminal region of human GFRAL.

Dilution WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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 GFRAL Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name GFRAL {ECO:0000303|PubMed:28846097,

ECO:0000312 | HGNC:HGNC:32789}

Function Brainstem-restricted receptor for GDF15 hormone, which triggers an

aversive response, characterized by nausea, vomiting, and/or loss of appetite

in response to various stresses (PubMed:28846097, PubMed:28846098, PubMed:28846099, PubMed:28953886, PubMed:36630958). The aversive response is both required to reduce continuing exposure to those stresses at the time of exposure and to promote avoidance behavior in the future (PubMed:28846097, PubMed:28846098, PubMed:28846099, PubMed:28953886, PubMed:36630958). The GDF15-GFRAL aversive response is triggered by stresses, such as anticancer drugs (camptothecin or cisplatin), cancers or drugs such as metformin (PubMed:32661391). Upon interaction with its ligand, GDF15, mediates the GDF15-induced autophosphorylation and activation of the RET tyrosine kinase receptor, leading to activation of MAPK-and AKT- signaling pathways (PubMed:31535977, PubMed:32661391). Ligand-binding activates GFRAL-expressing neurons localized in the area postrema and nucleus tractus solitarius of the brainstem (By similarity). The GDF15-GFRAL signal induces expression of genes involved in metabolism, such as lipid metabolism in adipose tissues (PubMed:32661391).

Cellular Location

Cell membrane; Single-pass membrane protein; Extracellular side

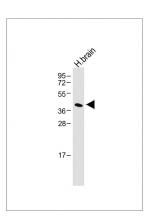
Tissue Location

Expressed in the brainstem, restricted to cells in the area postrema and the immediately adjacent region of the nucleus tractus solitarius (at protein level) (PubMed:28846097, PubMed:28846098). Detected at low levels in testis and adipose tissue (PubMed:28846097).

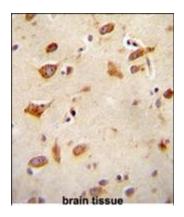
References

Fellay, J., et al. PLoS Genet. 5 (12), E1000791 (2009): Li, Z., et al. J. Neurochem. 95(2):361-376(2005) Mungall, A.J., et al. Nature 425(6960):805-811(2003) Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003)

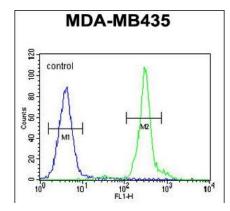
Images



Anti-GFRAL Antibody (C-term) at 1:500 dilution + Human brain whole tissue lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



GFRAL antibody (C-term) (Cat. #AP11069b) 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 the GFRAL antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GFRAL Antibody (C-term) (Cat. #AP11069b) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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