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GFRAL Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11069B

Specification

GFRAL Antibody (C-term) - 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**
Antigen Region	**366-394**

GFRAL Antibody (C-term) - 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~~1:2000
IHC-P~~1:50~100
FC~~1:10~50
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
GFRAL Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GFRAL Antibody (C-term) - 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

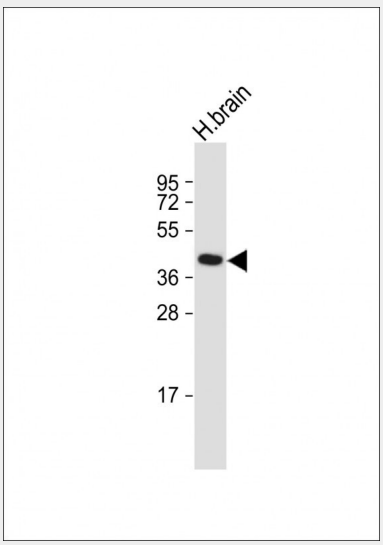
Tissue Location
Expressed in the brainstem, restricted to cells in the area postrema and the immediately adjacent region of the nucleus tractus solitarius (at protein level) (PubMed:28846097, PubMed:28846098). Detected at low levels in testis and adipose tissue (PubMed:28846097).

GFRAL Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GFRAL Antibody (C-term) - Images



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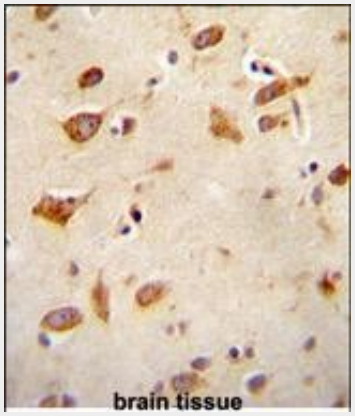
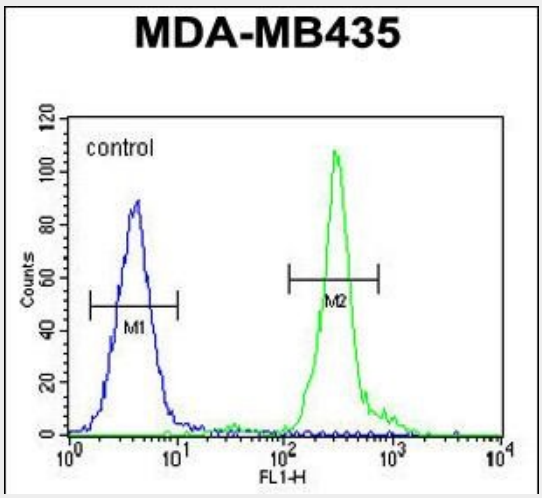
Anti-GFRAL Antibody (C-term) at 1:1000 dilution + Human brain whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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 (Rabbit IgG isotype) (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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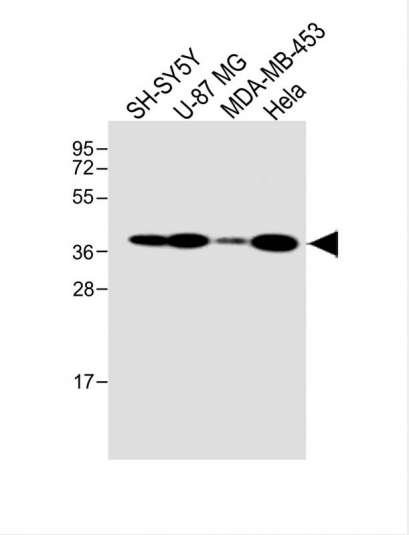

All lanes : Anti-GFRAL Antibody (C-term) at 1:2000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: U-87 MG whole cell lysate Lane 3: MDA-MB-453 whole cell lysate Lane 4: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

GFRAL Antibody (C-term) - 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)