10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# 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 |
| **Antigen Region** | 366-394 |

## 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

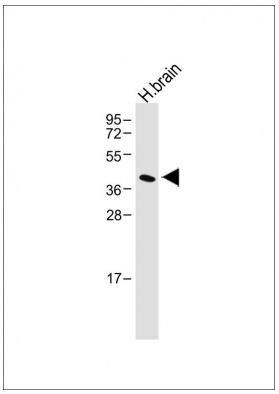
**Tissue Location**

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 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.