

GFRAL Antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI15616

Product Information

Application WB Primary Accession Q6UXV0

Other AccessionNM_207410, NP_997293ReactivityHuman, Rabbit, Pig, BovinePredictedHuman, Rabbit, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 44518

Additional Information

Gene ID 389400

Alias Symbol C6orf144, GRAL, UNQ9356, bA360D14.1

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

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-GFRAL antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions GFRAL Antibody - N-terminal region 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:<u>28846097</u>, PubMed:<u>28846098</u>, PubMed:<u>28846099</u>, PubMed:<u>28953886</u>, PubMed:<u>36630958</u>). 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: <u>28846097</u>, PubMed: <u>28846098</u>, PubMed: <u>28846099</u>,

PubMed:<u>28953886</u>, PubMed:<u>36630958</u>). The GDF15-GFRAL aversive response is triggered by stresses, such as anticancer drugs (camptothecin or cisplatin), cancers or drugs such as metformin (PubMed:<u>32661391</u>). 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

Clark H.F., et al. Genome Res. 13:2265-2270(2003). Mungall A.J., et al. Nature 425:805-811(2003). Sjoeblom T., et al. Science 314:268-274(2006).

Images

90 kDa_ 65 kDa_ 40 kDa_ 29 kDa_ 22 kDa_

Host: Rabbit

Target Name: GFRAL

Sample Tissue: Hela Whole cell lysate

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Antibody Dilution: 1.0µg/ml

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