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GFRAL Rabbit pAb

Catalog # AP96831

Product Information

Application	WB
Primary Accession	Q6UXV0
Other Accession	Q6UXV0
Reactivity	Human, Mouse
Predicted	Rat, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44518
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GFRAL
Epitope Specificity	151-250/394
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the GDNFR family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Gene ID	389400
Other Names	C6orf144; GRAL; UNQ9356; bA360D14.1; GFRAL_HUMAN; GFRAL; GDNF family receptor alpha like; chromosome 6 open reading frame 144
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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).

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