

GFR alpha 3 Antibody

Catalog # ASC10020

Product Information

Application	WB, E, IHC-P
Primary Accession	O35118
Other Accession	NP_034410 , 160298126
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	44307
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	GFR alpha 3 antibody can be used for detection of GFR alpha 3 expression by Western blot at 0.5 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL.

Additional Information

Gene ID	14587
Other Names	GFR alpha 3 Antibody: Y15110, GFRalpha3, GDNF family receptor alpha-3, GDNF receptor alpha-3, glial cell line derived neurotrophic factor family receptor alpha 3
Target/Specificity	Gfra3;
Reconstitution & Storage	GFR alpha 3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	GFR alpha 3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Gfra3
Function	Receptor for artemin (ARTN), a growth factor that supports the survival of sensory and sympathetic peripheral neurons. ARTN- binding leads to autophosphorylation and activation of the RET receptor.
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:O60609}; Lipid-anchor, GPI-anchor {ECO:0000250 UniProtKB:O60609}

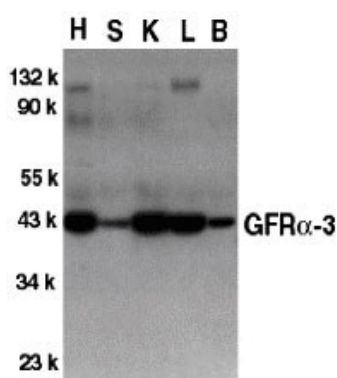
Background

GFR alpha 3 Antibody: Members of the glial cell line-derived neurotrophic factor (GDNF) family, including GDNF and neurturin (NTN) play essential roles in the control of vertebrate neuron survival and differentiation. A new member of the GDNF family was recently identified and designated persephin. Physiological responses to these neurotrophic factors require two receptor subunits, the novel glycosylphosphatidylinositol linked protein GFR α and Ret receptor tyrosine kinase GFR β . Following the findings of GFR α -1 and -2, a novel receptor in GFR α family was identified from human and mouse and designated GFR α -3. GFR α -3 binds persephin, thus, persephin, GFR α -3, and Ret PTK form a complex to transduce persephin signal and to mediate persephin function.

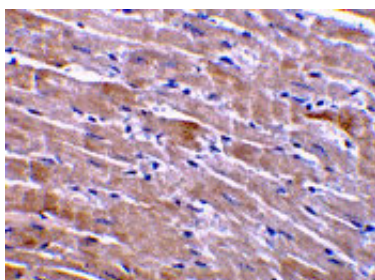
References

- Milbrandt J, de Sauvage FJ, Fahrner TJ, et al. Persephin, a novel neurotrophic factor related to GDNF and neurturin. *Neuron* 1998; 20:245-253.
- Nomenclature Committee. Nomenclature of GPI-linked receptors for the GDNF ligand family. GFR α . *Neuron* 1997; 19:485.
- Jing S, Yu Y, Fang M, et al. GFR α -2 and GFR α -3 are two new receptors for ligands of the DGNF family. *J. Biol. Chem.* 1997; 272:33111-7.
- Baloh RH, Gorodinsky A, Golden JP, et al. GFR α 3 is an orphan member of the GDNF/neurturin/persephin receptor family. *Proc. Natl. Acad. Sci. USA* 1998; 95:5801-6.

Images



Western blot analysis of GFR alpha 3 in crude cell membrane fractions of mouse heart (H), spleen (S), kidney (K), liver (L), and brain (B), respectively, with GFR alpha 3 antibody at 1.2 μ g/mL.



Immunohistochemistry of GFR alpha 3 in mouse heart tissue with GFR alpha 3 antibody at 10 μ g/mL.

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