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GFR alpha 1 Antibody
Catalog # ASC10018

Specification

GFR alpha 1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P56159
Other Accession	P56159, 20141405
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**51 kDa KDa**
Application Notes	**GFR alpha 1 antibody can be used for detection of GFR alpha 1 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 1 µg/mL.**

GFR alpha 1 Antibody - Additional Information

Gene ID **2674**

Other Names
GFR alpha 1 Antibody: GDNFR, RET1L, RETL1, TRNR1, GDNFRA, GFR-ALPHA-1, GDNF family receptor alpha-1, RET ligand 1, GDNF receptor alpha-1, GDNF family receptor alpha 1

Target/Specificity
GFRA1; GFR alpha 1 antibody is predicted to not cross-react with other members of the GFR alpha family of proteins.

Reconstitution & Storage
GFR alpha 1 antibody can be stored at 4℃ for three months and -20℃, 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 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GFR alpha 1 Antibody - Protein Information

Name GFRA1

Synonyms GDNFRA, RETL1, TRNR1

Function
Receptor for GDNF. Mediates the GDNF-induced autophosphorylation and activation of the RET receptor (By similarity).

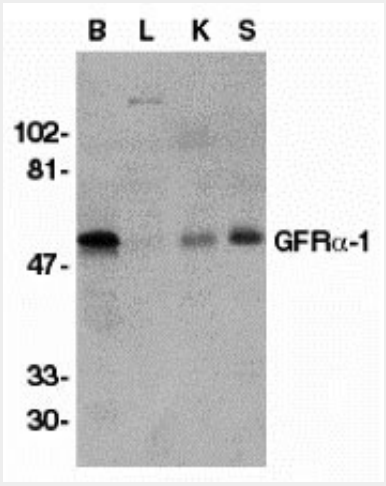
Cellular Location
Cell membrane {ECO:0000250|UniProtKB:Q62997}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:Q62997}. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:Q62997}. Endosome {ECO:0000250|UniProtKB:Q62997}. Endosome, multivesicular body {ECO:0000250|UniProtKB:Q62997}. Note=Localizes mainly to the plasma membrane. In the presence of SORL1, shifts to vesicular structures, including trans-Golgi network, endosomes and multivesicular bodies {ECO:0000250|UniProtKB:Q62997}

GFR alpha 1 Antibody - 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

GFR alpha 1 Antibody - Images



Western blot analysis of GFR alpha 1 in crude membrane fractions of human brain (B), liver (L), kidney (K), and spleen (S), respectively, with GFR alpha 1 antibody at 1 µg/mL.

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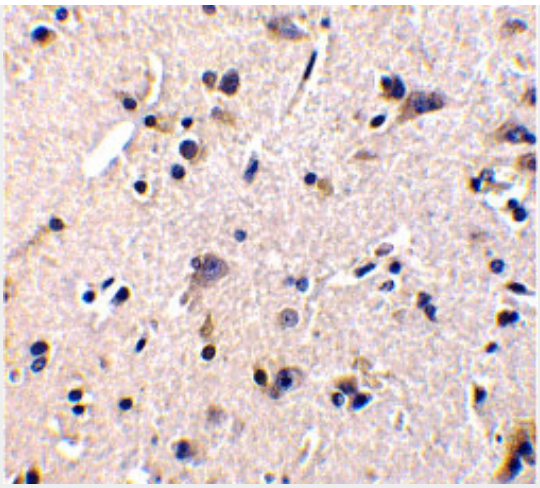

Immunohistochemistry of GFR alpha 1 in human brain tissue with GFR alpha 1 antibody at 1 µg/mL.

GFR alpha 1 Antibody - Background

GFR alpha 1 Antibody: Glial cell line-derived neurotrophic factor (GDNF) is a potent survival factor for central and peripheral neurons and is essential for the development of kidneys and the enteric nerves system. Physiological responses to GDNF require the presence of a novel glycosylphosphadidylinositol linked protein GDNFRalpha, which is a cell surface receptor for GDNF. The cDNAs encoding GDNFRalpha from human, rat, chicken and mouse have been cloned recently. GDNFRalpha was also termed Ret ligand 1 (RETL1) or TGF-beta-related neurotrophic factor receptor 1 (TrnR1) and nominated as GFRα-1 recently. GFRα-1 binds GDNF specifically and mediates activation of the Ret protein tyrosine kinase (PTK). Thus, GDNF, GFRα and the Ret PTK form a complex to transduce GDNF signal and to mediate GDNF function.

GFR alpha 1 Antibody - References

Jing S, Wen D, Yu Y, et al. GDNF-induced activation of the Ret protein tyrosine kinase is mediated by GDNFR-a, a novel receptor for GDNF. Cell 1996; 85:1113-24.
Treanor JJS, Goodman L, Sauvage FD, et al. Characterization of a multicomponent receptor for GDNF. Nature 1996;82:80-83.
Sanicola M, Hession C, Worley D, et al. Glial cell line-derived neurotrophic factor-dependent RET activation can be mediated by two different cell-surface accessory proteins. Proc. Natl. Acad. Sci. USA 1997; 94:6238-43.
Buj-Bello A, Adu J, Pinon LG, et al. Neurturin responsiveness requires a GPI-linked receptor and the Ret receptor tyrosine kinase. Nature 1997; 387:721-4