

**GFR alpha 2 Antibody**  
**Catalog # ASC10019****Specification**

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**GFR alpha 2 Antibody - Product Information**

Application	WB, ICC, E
Primary Accession	<a href="#">O00451</a>
Other Accession	<a href="#">AAC52036</a> , <a href="#">2145080</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 51 kDa

Application Notes	Observed: 52 kDa KDa GFR alpha 2 antibody can be used for detection of GFR alpha 2 by Western blot at 1 µg/mL. A 52 kDa band should be detected. Antibody can also be used for immunocytochemistry starting at 5 µg/mL.
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**GFR alpha 2 Antibody - Additional Information**

Gene ID 2675

**Other Names**

GFR alpha 2 Antibody: NTNRA, RETL2, TRNR2, GDNFRB, NRTNR-ALPHA, GDNF family receptor alpha-2, GDNF receptor beta, GDNF receptor alpha-2, GDNF family receptor alpha 2

**Target/Specificity**

GFRA2;

**Reconstitution & Storage**

GFR alpha 2 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 2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**GFR alpha 2 Antibody - Protein Information**

**Name** GFRA2

**Synonyms** GDNFRB, RETL2, TRNR2 {ECO:0000303|PubMed

**Function**

Receptor for neurturin (NRTN), a growth factor that supports the survival of sympathetic neurons

(PubMed:<a href="http://www.uniprot.org/citations/10829012" target="\_blank">10829012</a>, PubMed:<a href="http://www.uniprot.org/citations/29414779" target="\_blank">29414779</a>, PubMed:<a href="http://www.uniprot.org/citations/31535977" target="\_blank">31535977</a>, PubMed:<a href="http://www.uniprot.org/citations/9182803" target="\_blank">9182803</a>). NRTN-binding leads to autophosphorylation and activation of the RET receptor (PubMed:<a href="http://www.uniprot.org/citations/31535977" target="\_blank">31535977</a>). Also able to mediate GDNF signaling through the RET tyrosine kinase receptor (PubMed:<a href="http://www.uniprot.org/citations/9182803" target="\_blank">9182803</a>).

#### Cellular Location

Cell membrane {ECO:0000250|UniProtKB:O08842}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:O08842}

#### Tissue Location

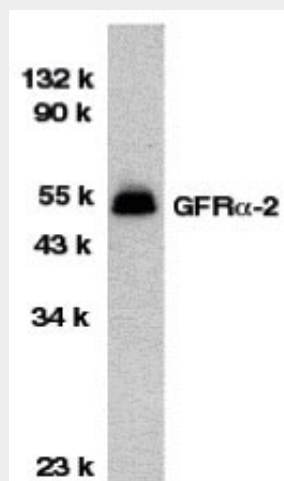
[Isoform 1]: found in both brain and placenta.

### GFR alpha 2 Antibody - Protocols

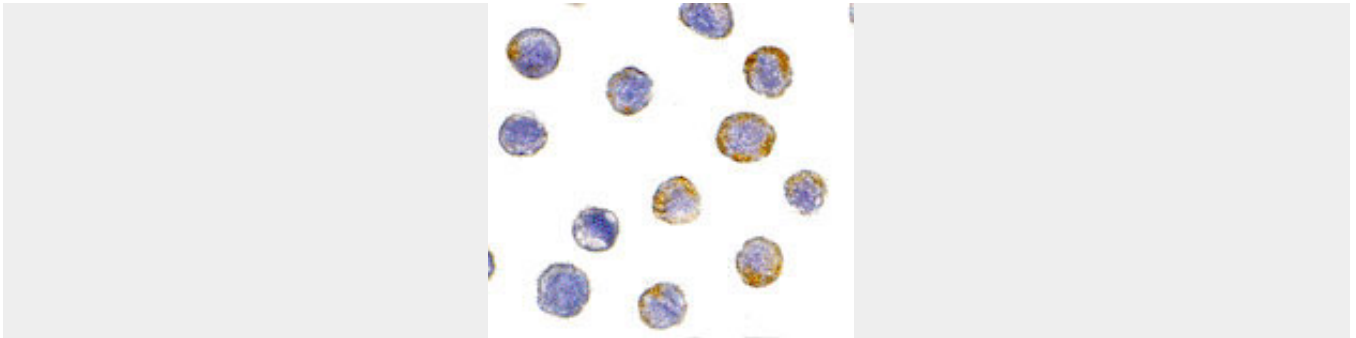
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GFR alpha 2 Antibody - Images



Western blot analysis of GFR alpha 2 in HeLa total cell lysate with GFR alpha 2 antibody at 1 µg/mL.



Immunocytochemistry of GFR alpha 2 in HeLa cells with GFR alpha 2 antibody at 5 µg/mL.

#### **GFR alpha 2 Antibody - Background**

GFR alpha 2 Antibody: Members of the glial cell line-derived neurotrophic factor (GDNF) family, including GDNF and neurturin (NTN) play key roles in the control of vertebrate neuron survival and differentiation. Physiological responses to NTN require the presence of a novel glycosylphosphatidylinositol linked protein NTN $\alpha$ , which is a cell surface receptor for NTN. The cDNAs encoding NTN $\alpha$  from human, rat, chicken, and mouse have been cloned recently. NTN $\alpha$  was also termed GDNFR $\beta$ , Ret ligand 2 (RETL2) or TGF $\beta$ -related neurotrophic factor receptor 2 (TrnR2) and nominated as GFR $\alpha$ -2 recently. GFR $\alpha$ -2 binds NTN and mediates activation of RET receptor tyrosine kinase by both NTN and GDNF. Thus, NTN, GFR $\alpha$ -2, and the Ret PTK form a complex to transduce NTN signal and to mediate NTN function.

#### **GFR alpha 2 Antibody - References**

Kotzbauer PT, Lampe PA, Heuckeroth RO, et al. Neurturin, a relative glial-cell-line-derived neurotrophic factor. *Nature* 1996; 384:467-70.  
Klein RD, Sherman D, Ho WH, et al. A GPI-linked protein that interacts with Ret to form a candidate neurturin receptor. *Nature* 1997; 387:717-21.  
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.  
Baloh RH, Tansey MG, Golden JP, et al. TrnR2, a novel receptor that mediates neurturin and GDNF signaling through Ret. *Neuron* 1997; 18:793-802.