

# **GFRalpha-1 Antibody**

Rabbit Polyclonal Antibody Catalog # ABV11168

### **Specification**

## **GFRalpha-1 Antibody - Product Information**

Application WB
Primary Accession P56159

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 51456

## **GFRalpha-1 Antibody - Additional Information**

**Gene ID 2674** 

Application & Usage Western blot analysis (0.5-4 μg/ml).

However, the optimal conditions should be

determined individually.

**Other Names** 

Glial cell line derived neurotrophic factor, GDNF, GFR alpha, GFR a, GFR-alpha, GFR-a

Target/Specificity

GFRa-1

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

### **Formulation**

100  $\mu$ g (0.5 mg/ml) immunoaffinity purified rabbit anti-GFR $\alpha$ -1 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

#### Handling

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

#### **Precautions**

GFRalpha-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



### **GFRalpha-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}

## **GFRalpha-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

#### GFRalpha-1 Antibody - Images

### GFRalpha-1 Antibody - Background

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 GDNFR $\alpha$ , which is a cell surface receptor for GDNF. The cDNA encoding GDNFR $\alpha$  from human, rat, chicken and mouse have been cloned recently. GDNFR $\alpha$  was also termed Ret ligand 1 (RETL1) or TGF- $\beta$ -related neurotrophic factor receptor 1 (TrnR1) and nominated as GFR $\alpha$ -1 recently. GFR $\alpha$ -1 binds GDNF specifically and mediates activation of the Ret protein tyrosine kinase (PTK). Thus, GDNF, GFR $\alpha$  and the Ret PTK from a complex to transduce GDNF signal and to mediate GDNF function.