

# GFR alpha 3 Antibody

Catalog # ASC10020

## Specification

# GFR alpha 3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

**Application Notes** 

IF, IHC <u>035118</u> <u>NP\_034410</u>, <u>14587</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 44 kDa

Observed: 43 kDa KDa GFR alpha 3 antibody can be used for detection of GFR alpha 3 expression by Western blot at 0.5  $\mu$ g/mL. Antibody can also be used for immunohistochemistry starting at 5  $\mu$ g/mL. For immunofluorescence start at 5  $\mu$ g/mL.

**GFR alpha 3 Antibody - 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

GFR alpha 3 antibody was raised against a 14 amino acid peptide near the center of murine GFR alpha 3.<br/>br>The immunogen is located within the last 50 amino acids of GFR alpha 3.

## **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.

## GFR alpha 3 Antibody - Protein Information

Name Gfra3

Function

Receptor for the glial cell line-derived neurotrophic factor, artemin. Mediates the artemin-induced



autophosphorylation and activation of the RET receptor tyrosine kinase (By similarity).

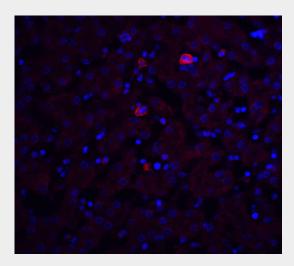
**Cellular Location** Cell membrane; Lipid-anchor, GPI- anchor

## GFR alpha 3 Antibody - Protocols

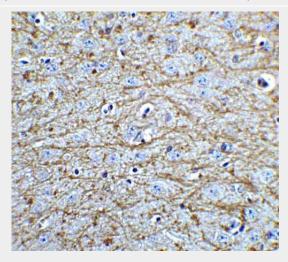
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

# GFR alpha 3 Antibody - Images



Immunofluorescence of Trophinin in mouse liver tissue with Trophinin antibody at 20 µg/ml.



Immunohistochemistry of SOX2 in mouse brain tissue with SOX2 Antibodyat 5 µg/mL.



# GFR alpha 3 Antibody - 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 glycosylphosphadidylinositol linked protein GFR $\alpha$  and Ret receptor tyrosine kinase GFRbeta. Following the findings of GFR $\alpha$ -1 and -2, a novel receptor in GFR $\alpha$  family was identified from human and mouse and designated GFR $\alpha$ -3. GFR $\alpha$ -3 binds persephin, thus, persephin, GFR $\alpha$ -3, and Ret PTK form a complex to transduce persephin signal and to mediate persephin function.

# GFR alpha 3 Antibody - 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.

Nomeclature Committee. Nomeclature of GPI-linked receptors for the GDNF ligand family. GFRa. Neuron 1997; 19:485.

Jing S, Yu Y, Fang M, et al. GFR $\alpha$ -2 and GFR $\alpha$ -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. GFRα3 is an orphan member of the

GDNF/neurturin/persephin receptor family. Proc. Natl. Acad. Sci. USA 1998; 95:5801-6.