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GFR alpha 2 Antibody

Catalog # ASC10019

Product Information

Application	WB, ICC, E
Primary Accession	O00451
Other Accession	AAC52036, 2145080
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	51544
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	GFR alpha 2 antibody can be used for detection of GFR alpha 2 by Western blot at 1 g/mL. A 52 kDa band should be detected. Antibody can also be used for immunocytochemistry starting at 5 g/mL.

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

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:10829012, PubMed:29414779, PubMed:31535977, PubMed:9182803). NRTN-binding leads to autophosphorylation and activation of the RET receptor (PubMed:31535977). Also able to mediate GDNF signaling through the RET tyrosine kinase receptor (PubMed:9182803).

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.

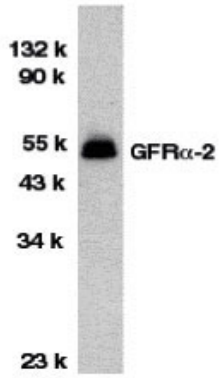
Background

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 glycosylphosphadidylinositol linked protein NTNRalpha, which is a cell surface receptor for NTN. The cDNAs encoding NTNRalpha from human, rat, chicken, and mouse have been cloned recently. NTNRalpha was also termed GDNFRβ, Ret ligand 2 (RETL2) or TGFbeta-related neurotrophic factor receptor 2 (TrnR2) and nominated as GFRα-2 recently. GFRα-2 binds NTN and mediates activation of RET receptor tyrosine kinase by both NTN and GDNF. Thus, NTN, GFRα-2, and the Ret PTK form a complex to transduce NTN signal and to mediate NTN function.

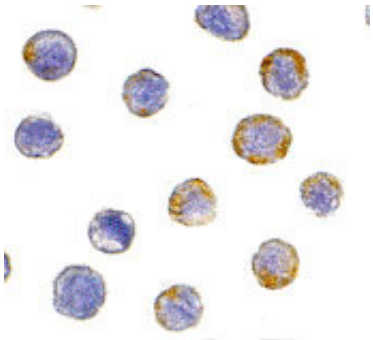
References

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.

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.

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