

GFR α -4 (M-77): sc-135190

BACKGROUND

Glial cell line-derived neurotrophic factor (GDNF) and the related neurotrophic factor neurturin (NTN) are potent survival factors for central and peripheral neurons. Receptors for these factors include GFR α -1 (previously designated GDNFR- α), GFR α -2 (also designated RETL2), GFR α -3 and GFR α -4 (also known as persephin receptor). The receptors do not contain transmembrane domains and are attached to the cell membrane by glycosylphosphoinositol linkage. Binding of GDNF or NTN to one of these receptors leads to the activation of the tyrosine kinase Ret. GFR α -4 mediates the activation and GDNF-induced autophosphorylation of the RET receptor. It is mainly expressed in the adult thyroid gland, but lower levels may also be detected in fetal adrenal and thyroid glands.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GFRA4 (human) mapping to 20p13; Gfra4 (mouse) mapping to 2 F1.

SOURCE

GFR α -4 (M-77) is a rabbit polyclonal antibody raised against amino acids 104-180 mapping within an internal region of GFR α -4 precursor of mouse origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GFR α -4 (M-77) is recommended for detection of mature GFR α -4 and GFR α -4 precursor of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GFR α -4 siRNA (h): sc-60683, GFR α -4 siRNA (m): sc-60684, GFR α -4 shRNA Plasmid (h): sc-60683-SH, GFR α -4 shRNA Plasmid (m): sc-60684-SH, GFR α -4 shRNA (h) Lentiviral Particles: sc-60683-V and GFR α -4 shRNA (m) Lentiviral Particles: sc-60684-V.

Molecular Weight of unglycosylated GFR α -4: 29 kDa.

Molecular Weight of glycosylated GFR α -4: 33 kDa.

Positive Controls: EOC 20 whole cell lysate and BC3H1 whole cell lysate.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.