

# GFR $\alpha$ -2 (H-89): sc-28953

## BACKGROUND

Glial cell line-derived neurotrophic factor (GDNF) and the related neurotrophic factor neurturin (NTN) are potent survival factors for central and peripheral neurons. GDNF is a glycosylated, disulfide-bonded homodimer that is distantly related to the TGF $\beta$  superfamily of growth factors. Three receptors for these factors, GFR $\alpha$ -1 (also designated GDNFR- $\alpha$ , RETL1 or TrnR-1), GFR $\alpha$ -2 (also designated GDNFR- $\beta$ , RETL2, NTNR- $\alpha$  or TrnR-2) and GFR $\alpha$ -3 have been identified. The receptors do not contain transmembrane domains and are attached to the cell membrane by glycosyl-phosphoinositol linkage. Both GFR $\alpha$ -1 and GFR $\alpha$ -2 have been shown to mediate the GDNF-dependent and NTN-dependent phosphorylation and activation of the tyrosine kinase Ret. GFR $\alpha$ -3 is expressed only during development.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GFRA2 (human) mapping to 8p21.3; Gfra2 (mouse) mapping to 14 D2.

## SOURCE

GFR $\alpha$ -2 (H-89) is a rabbit polyclonal antibody raised against amino acids 356-444 mapping near the C-terminus of GFR $\alpha$ -2 of human origin.

## PRODUCT

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

## APPLICATIONS

GFR $\alpha$ -2 (H-89) is recommended for detection of precursor and mature forms of GFR $\alpha$ -2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

GFR $\alpha$ -2 (H-89) is also recommended for detection of precursor and mature forms of GFR $\alpha$ -2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GFR $\alpha$ -2 siRNA (h): sc-35471, GFR $\alpha$ -2 siRNA (m): sc-35472, GFR $\alpha$ -2 shRNA Plasmid (h): sc-35471-SH, GFR $\alpha$ -2 shRNA Plasmid (m): sc-35472-SH, GFR $\alpha$ -2 shRNA (h) Lentiviral Particles: sc-35471-V and GFR $\alpha$ -2 shRNA (m) Lentiviral Particles: sc-35472-V.

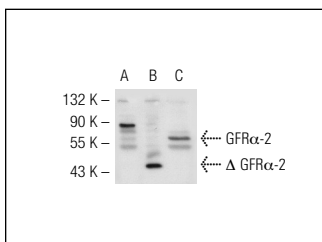
Molecular Weight of GFR $\alpha$ -2: 72 kDa.

Positive Controls: rat testis extract: sc-2400 or GFR $\alpha$ -2 (h): 293T Lysate: sc-115868.

## 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 Blotto 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.

## DATA



GFR $\alpha$ -2 (H-89): sc-28953. Western blot analysis of GFR $\alpha$ -2 expression in non-transfected 293T: sc-117752 (A) and truncated human GFR $\alpha$ -2 transfected 293T: sc-115868 (B) whole cell lysates and rat testis (C) tissue extract.

## STORAGE

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

## RESEARCH USE

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