

FRS2 (E-18): sc-51490

BACKGROUND

FRS2 (also designated SNT or p90) is a lipid-anchored docking protein that becomes tyrosine phosphorylated in response to FGF or NGF stimulation and subsequently binds to GRB2/Sos complexes. The GRB2 adapter protein links receptor tyrosine kinases to the Ras/MAPK signaling pathway but does not interact directly with FGF receptors. FRS2 thus provides a link between activation of FGF and NGF receptors and the Ras/MAPK pathway. FRS2 contains four Grb2 binding sites, a myristylation sequence and a PTP domain. Myristylation of FRS2 is essential for membrane localization, tyrosine phosphorylation, GRB2/Sos recruitment and MAPK activation. The function of FRS2 in FGF receptor signaling is analogous to that of IRS1 in response to Insulin receptor stimulation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FRS2 (human) mapping to 12q15; Frs2 (mouse) mapping to 10 D2.

SOURCE

FRS2 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of FRS2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-51490 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FRS2 (E-18) is recommended for detection of FRS2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

FRS2 (E-18) is also recommended for detection of FRS2 in additional species, including canine and porcine.

Suitable for use as control antibody for FRS2 siRNA (h): sc-35413, FRS2 siRNA (m): sc-35414, FRS2 shRNA Plasmid (h): sc-35413-SH, FRS2 shRNA Plasmid (m): sc-35414-SH, FRS2 shRNA (h) Lentiviral Particles: sc-35413-V and FRS2 shRNA (m) Lentiviral Particles: sc-35414-V.

Molecular Weight of phosphorylated FRS2: 60-90 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, ECV304 cell lysate: sc-2269 or MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.

RESEARCH USE

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



Try **FRS2 (A-5): sc-17841**, our highly recommended monoclonal alternative to FRS2 (E-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **FRS2 (A-5): sc-17841**.