

IGF-IIR (M-14): sc-14414

BACKGROUND

The mannose 6-phosphate/Insulin-like growth factor II receptor, IGF-IIR (also designated M6P/IGF2R), is a 300 kDa integral glycoprotein that is ubiquitously expressed. IGF-IIR mediates the activation of TGF β 1 (a growth inhibitor), the degradation of IGF-II and the transport of lysosomal enzymes, by binding glycoproteins through two of its extracytoplasmic domains. Subsequently, IGF-IIR can form oligomeric complexes, which increase the affinity of IGF-IIR for lysosomal enzymes. Unlike IGF-IR, IGF-IIR does not potentiate the signaling of IGF-I or IGF-II, which have mitogenic, cell survival and Insulin-like effects. Therefore, IGF-IIR is characterized as a tumor suppressor. Furthermore, the IGF-IIR gene is located on chromosome 6q26, which is commonly mutated or deleted in several human cancers.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Igf2r (mouse) mapping to 17 A1.

SOURCE

IGF-IIR (M-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IGF-IIR of mouse origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-14414 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IGF-IIR (M-14) is recommended for detection of IGF-IIR of mouse and rat 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).

Suitable for use as control antibody for IGF-IIR siRNA (m): sc-37117, IGF-IIR shRNA Plasmid (m): sc-37117-SH and IGF-IIR shRNA (m) Lentiviral Particles: sc-37117-V.

Molecular Weight of IGF-IIR: 300 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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.

RESEARCH USE

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

PROTOCOLS

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



Try **IGF-IIR (29): sc-136321**, our highly recommended monoclonal alternative to IGF-IIR (M-14).