BACKGROUND

The c-Met oncogene was originally isolated from a chemical carcinogen-treated human osteogenic sarcoma cell line by transfection analysis in NIH/3T3 cells. The Met proto-oncogene product was identified as a transmembrane receptor-like protein with tyrosine kinase activity that is expressed in many tissues. A high proportion of spontaneous NIH/3T3 transformants overexpress c-Met and by transfection analysis the c-Met proto-oncogene has been shown to exhibit transforming activity. Tyrosine phosphorylation of apparently normal Met protein has also been observed in certain human gastric carcinoma cell lines. The c-Met gene product has been identified as the cell-surface receptor for hepatocyte growth factor, a plasminogen-like protein thought to be a humoral mediator of liver regeneration.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: MET (human) mapping to 7q31.2.

SOURCE

Met (D-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1375-1391 within a C-terminal cytoplasmic domain of Met of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Met (D-4) is available conjugated to agarose (sc-514148 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514148 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-514148 PE), fluorescein (sc-514148 FITC), Alexa Fluor® 488 (sc-514148 AF488) or Alexa Fluor® 647 (sc-514148 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-514148 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

Met (D-4) is recommended for detection of Met of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 Met siRNA (h): sc-29397, Met shRNA Plasmid (h): sc-29397-SH and Met shRNA (h) Lentiviral Particles: sc-29397-V.

Molecular Weight of Met precursor: 170 kDa.
Molecular Weight of Met α subunit: 50 kDa.
Molecular Weight of Met β subunit: 145 kDa.
Positive Controls: MIA PaCa-2 cell lysate: sc-2285, A549 cell lysate: sc-2413 or BXPC-3 whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:


DATA

Met (D-4): sc-514148. Western blot analysis of Met expression in A549 (A), MIA PaCa-2 (B) and BXPC-3 (C) whole cell lysates.

Met (D-4): sc-514148. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human central cortex tissue showing cytoplasmic staining of neuronal cells (B).

RESEARCH USE

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