SANTA CRUZ BIOTECHNOLOGY, INC.

Met (C-12): sc-10

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 trans-membrane receptor-like protein with tyrosine kinase activity that is expressed in many tissues. A high proportion of spontaneous NIH/3T3 transformants over-express 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 humoral mediator of liver regeneration.

CHROMOSOMAL LOCATION

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

SOURCE

Met (C-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of Met 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-10 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-10 AC, 500 µg/ 0.25 ml agarose in 1 ml.

APPLICATIONS

Met (C-12) is recommended for detection of Met of human origin by Western Blotting (starting dilution 1:200, 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: Human breast carcinoma tissue, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

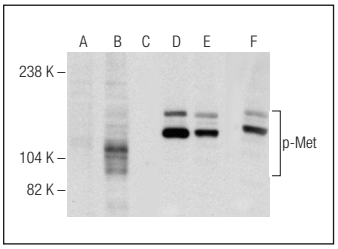
STORAGE

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

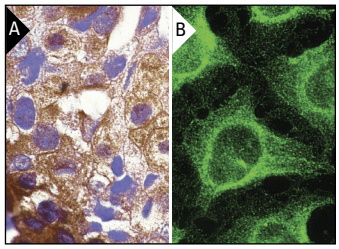
RESEARCH USE

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

DATA



Western blot analysis of Met phosphorylation in untreated (**A**,**D**), HGF treated (**B**,**E**) and HGF and lambda protein phosphatase (sc-200312A) treated (**C**,**F**) HeLa whole cell lysates. Antibodies tested include p-Met (Tyr 1365): sc-34087 (**A**,**B**,**C**) and Met (C-12): sc-10 (**D**,**E**,**F**).



Met (C-12): sc-10. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing membrane and cytoplasmic staining (**A**). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization (**B**).

SELECT PRODUCT CITATIONS

1. Kermorgant, S., et al. 1997. Developmental expression and functionality of hepatocyte growth factor and c-Met in human fetal digestive tissues. Gastroenterology 112: 1635-1647.
2. Du, L., et al. 2011. Aspergiolides C and D: spirocyclic aromatic polyketides with potent protein kinase c-Met inhibitory effects. Chemistry 17: 1319-1326.
3. Pavone, L.M., et al. 2011. Intracellular signaling cascades triggered by the NK1 fragment of hepatocyte growth factor in human prostate epithelial cell line PNT1A. Cell. Signal. 23: 1961-1971.
4. Hu, P., et al. 2011. Multiplexed quantum dot labeling of activated c-Met signaling in castration-resistant human prostate cancer. PLoS ONE 6: e28670.
5. Kühbacher, A., et al. 2012. Phosphatidylinositol 5-phosphatase oculocerebrorenal syndrome of Lowe protein (OCRL) controls actin dynamics during early steps of *Listeria* monocytogenes infection. J. Biol. Chem. 287: 13128-13136.
6. Ancot, F., et al. 2012. Shedding-generated Met receptor fragments can be routed to either the proteasomal or the lysosomal degradation pathway. Traffic 13: 1261-1272.
7. Ricci, F., et al. 2012. Ovarian carcinoma tumor-initiating cells have a mesenchymal phenotype. Cell Cycle 11: 1966-1976.