SANTA CRUZ BIOTECHNOLOGY, INC.

Met (C-28): sc-161

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 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. Tyrosine phosphorylation enhances the receptor kinase activity, while serine phosphorylation of Met on residue 985 has an inhibitory effect. 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.

CHROMOSOMAL LOCATION

Genetic locus: MET (human) mapping to 7q31.2; Met (mouse) mapping to 6 A2.

SOURCE

Met (C-28) 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-161 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-161 AC, 500 µg/0.25 ml agarose in 1 ml.

Available as HRP conjugate for Western blotting, sc-161 HRP, 200 µg/1 ml.

APPLICATIONS

Met (C-28) is recommended for detection of Met of human and, to a lesser extent, mouse and rat 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 siRNA (m): sc-35924, Met shRNA Plasmid (h): sc-29397-SH, Met shRNA Plasmid (m): sc-35924-SH, Met shRNA (h) Lentiviral Particles: sc-29397-V and Met shRNA (m) Lentiviral Particles: sc-35924-V.

Molecular Weight of Met precursor: 170 kDa.

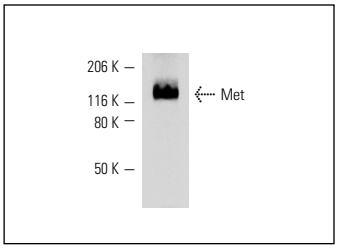
Molecular Weight of Met α subunit: 50 kDa.

Molecular Weight of Met β subunit: 145 kDa.

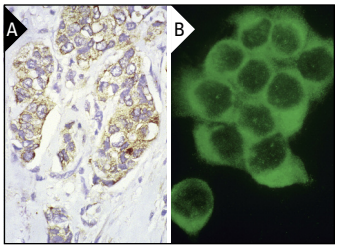
STORAGE

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

DATA



Met (C-28): sc-161. Western blot analysis of Met p140 expression in A-431 whole cell lysate.



Met (C-28): sc-161. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue (**A**). immunofluorescence staining of methanol-fixed A-431 cells (**B**) showing membrane and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Danilkovitch-Miagkova, A., et al. 2001. Oncogenic mutants of Ron and Met receptor tyrosine kinases cause activation of the β-catenin pathway. Mol. Cell. Biol. 21: 5857-5868.
2. Gmyrek, G.A., et al. 2001. Normal and malignant prostate epithelial cells differ in their response to hepatocyte growth factor/scatter factor. Am. J. Pathol. 159: 579-590.
3. Cacciotti, P., et al. 2001. SV40 replication in human mesothelial cells induces HGF/Met receptor activation: a model for viral-related carcinogenesis of human malignant mesothelioma. Proc. Natl. Acad. Sci. USA 98: 12032-12037.
4. Genestine, M., et al. 2011. Enhanced neuronal Met signalling levels in ALS mice delay disease onset. Cell Death Dis. 2: e130.
5. Furlan, A., et al. 2011. Abl interconnects oncogenic Met and p53 core pathways in cancer cells. Cell Death Differ. 10: 1608-1616.
6. Zhang, X., et al. 2011. A maternal high-fat diet represses the expression of antioxidant defense genes and induces the cellular senescence pathway in the liver of male offspring rats. J. Nutr. 141: 1254-1259.
7. Wan, X.B., et al. 2012. Molecular prognostic prediction for locally advanced nasopharyngeal carcinoma by support vector machine integrated approach. PLoS ONE 7: e31989.
8. Furlan, A., et al. 2012. Identification of new aminoacid amides containing the imidazo[2,1-β]benzothiazol-2-ylphenyl moiety as inhibitors of tumorigenesis by oncogenic Met signaling. Eur. J. Med. Chem. 1: 239-254.
9. Furlan, A., et al. 2012. Combined drug action of 2-phenylimidazo[2,1-β] benzothiazole derivatives on cancer cells according to their oncogenic molecular signatures. PLoS ONE 10: e46738.

RESEARCH USE

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