SANTA CRUZ BIOTECHNOLOGY, INC.

Met (SP260): sc-162-R

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 (SP260)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of Met of mouse 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-162 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Met (SP260)-R is recommended for detection of Met of mouse, rat and, to a lesser extent, 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Met (SP260)-R is also recommended for detection of Met in additional species, including canine and porcine.

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.

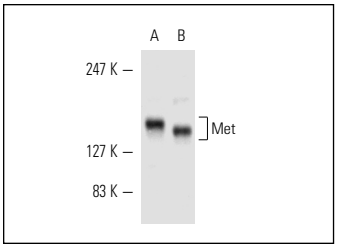
STORAGE

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

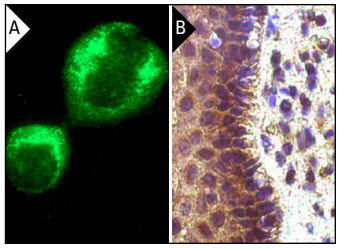
RESEARCH USE

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

DATA



Met (SP260): sc-162. Western blot analysis of Met expression in LADMAC whole cell lysate (**A**) and rat pancreas tissue extract (**B**).



Met (SP260): sc-162. Immunofluorescence staining of methanol-fixed A-431 cells showing membrane localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cervix tissue showing cytoplasmic staining of squamous epithelial cells (**B**).

SELECT PRODUCT CITATIONS

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5. Dai, J.Y., et al. 2009. The Met protooncogene is a transcriptional target of NFκB: implications for cell survival. J. Cell. Biochem. 107: 1222-1236.
6. Zhang, X. 2010. Hepatocyte growth factor system in the mouse uterus: variation across the estrous cycle and regulation by 17-β-estradiol and progesterone. Biol. Reprod. 82: 1037-1048.
7. Leo, C., et al. 2011. Activated Met signalling in the developing mouse heart leads to cardiac disease. PLoS ONE 6: e14675.
8. Riess, I., et al. 2011. A mouse model for spatial and temporal expression of HGF in the heart. Transgenic Res. 20: 1203-1216.
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10. Medová, M., et al. 2012. MET inhibition in tumor cells by PHA665752 impairs homologous recombination repair of DNA double strand breaks. Int. J. Cancer 130: 728-734.
11. Ricci, G., et al. 2012. Hepatocyte growth factor is a mouse fetal leydig cell terminal differentiation factor. Biol. Reprod. 87: 146.