

# Met (H-190): sc-8307

## 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 (H-190) is a rabbit polyclonal antibody raised against amino acids 743-932 mapping within an extracellular 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.

## APPLICATIONS

Met (H-190) is recommended for detection of Met of mouse, rat and 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).

Met (H-190) is also recommended for detection of the 145 kDa β chain of Met in additional species, including equine, canine, bovine 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.

Positive Controls: A-431 whole cell lysate: sc-2201.

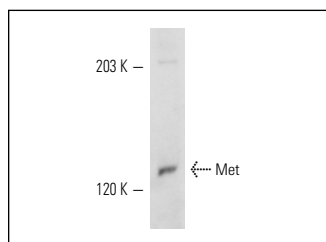
## STORAGE

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

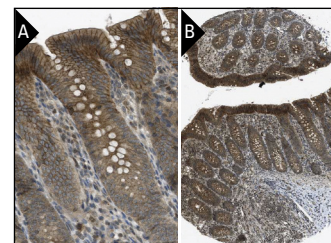
## RESEARCH USE

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

## DATA



Met (H-190): sc-8307. Western blot analysis of Met expression in LADMAC whole cell lysate.



Met (H-190): sc-8307. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing membrane staining of glandular cells at high (A) and low (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

## SELECT PRODUCT CITATIONS

1. Helou, K., et al. 1999. Amplification and overexpression of the hepatocyte growth factor receptor (HGFR/MET) in rat DMBA sarcomas. *Oncogene* 18: 3226-3234.
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3. Ding, S., et al. 2003. HGF receptor up-regulation contributes to the angiogenic phenotype of human endothelial cells and promotes angiogenesis *in vitro*. *Blood* 101: 4816-4822.
4. Anastasi, E., et al. 2005. The acquisition of an Insulin-secreting phenotype by HGF-treated rat pancreatic ductal cells (ARIP) is associated with the development of susceptibility to cytokine-induced apoptosis. *J. Mol. Endocrinol.* 34: 367-376.
5. Hoffmann, K.M., et al. 2006. Gastrointestinal hormones cause rapid c-Met receptor downregulation by a novel mechanism involving clathrin-mediated endocytosis and a lysosome-dependent mechanism. *J. Biol. Chem.* 281: 37705-37719.
6. Giacobini, P., et al. 2007. Hepatocyte growth factor acts as a motogen and guidance signal for gonadotropin hormone-releasing hormone-1 neuronal migration. *J. Neurosci.* 27: 431-445.
7. Fan, S., et al. 2007. Ras effector pathways modulate scatter factor-stimulated NFκB signaling and protection against DNA damage. *Oncogene* 26: 4774-4796.
8. Garzotto, D., et al. 2008. Hepatocyte growth factor regulates migration of olfactory interneuron precursors in the rostral migratory stream through Met-GRB2 coupling. *J. Neurosci.* 28: 5901-5909.
9. Fan, S., et al. 2009. Role of Src signal transduction pathways in scatter factor-mediated cellular protection. *J. Biol. Chem.* 284: 7561-7577.