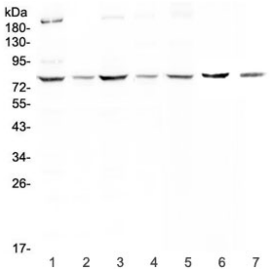
MST1 Polyclonal Antibody / MSP Antibody (RQ4066)

Catalog No.	Formulation	Size
RQ4066	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P26927
Applications	Western Blot : 0.5-1ug/ml
Limitations	This MST1 Polyclonal Antibody / MSP Antibody is available for research use only.



MST1 Polyclonal Antibody by WB in human and rodent lysates. Western blot analysis using MST1 Polyclonal Antibody at 0.5 ug/ml. Lane 1: HeLa; lane 2: MCF7; lane 3: HepG2; lane 4: SKOV3; lane 5: A549; lane 6: rat kidney; lane 7: mouse kidney. A distinct immunoreactive band is detected near 80 kDa across all seven samples, consistent with the predicted molecular weight of macrophage stimulating protein (MSP). Band intensity is relatively uniform, with slightly stronger signals in several human cell lysates. Background staining is minimal, and no prominent additional bands are visible. This MSP Antibody recognizes the secreted growth factor also known as hepatocyte growth factor-like protein.

Description

MST1 Polyclonal Antibody recognizes macrophage stimulating protein (MSP), a secreted growth factor encoded by the MST1 gene. Also known as hepatocyte growth factor-like protein (HGFL), MSP belongs to the plasminogen-related growth factor family and serves as the principal ligand for the RON receptor tyrosine kinase, encoded by MST1R. The MSP-RON signaling pathway regulates cell migration, survival, adhesion, and inflammatory responses. MST1 should not be confused with mammalian STE20-like kinase 1, an unrelated signaling enzyme encoded by the STK4 gene.

The human MST1 gene is located on chromosome 3 and encodes a precursor protein containing approximately 711 amino acids. MSP shares structural similarities with hepatocyte growth factor (HGF), including an N-terminal hairpin domain, four kringle domains, and a C-terminal serine protease-like domain. Despite this structural resemblance, MSP lacks conventional proteolytic activity. The protein is synthesized as an inactive single-chain precursor that undergoes proteolytic cleavage to generate alpha and beta chains connected by disulfide bonds. This processing is essential for efficient activation of the RON receptor.

Binding of mature MSP to RON promotes receptor activation and phosphorylation of intracellular signaling proteins. Downstream pathways include PI3K-AKT and MAPK-ERK, which influence cellular proliferation, migration, and survival. MSP-RON signaling is particularly important in epithelial cells and macrophages, where it contributes to tissue repair, wound healing, and regulation of inflammatory activity. The pathway can influence macrophage responses to inflammatory stimuli and help coordinate cellular behavior during tissue injury.

Abnormal MSP-RON signaling has been investigated in cancer progression, chronic inflammation, and disorders involving tissue remodeling. Increased RON activity may promote tumor cell motility, invasion, and resistance to apoptosis in certain biological contexts. Conversely, the pathway also participates in normal tissue maintenance and recovery from injury. Understanding these context-dependent effects remains an important area of growth factor and receptor signaling research.

The MSP Antibody is useful for research investigating macrophage stimulating protein and its relationship to RON-dependent signaling. NSJ Bioreagents offers antibodies targeting this growth factor for studies of cellular communication and inflammatory regulation. An MST1 Polyclonal Antibody provides a tool for examining MSP expression and its involvement in growth factor signaling, immune responses, and tissue homeostasis.

For an alternative antibody targeting macrophage stimulating protein, see our MST1 Antibody.

Application Notes

Optimal dilution of the MST1 Polyclonal Antibody / MSP Antibody should be determined by the researcher.

Immunogen

Amino acids QRSPLNDFQVLRGTELQHLLHAVVPGPWQEDVADAEE from the human protein were used as the immunogen for the MST1 Polyclonal Antibody.

Storage

After reconstitution, the MST1 Polyclonal Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Macrophage Stimulating Protein antibody, MSP antibody, Hepatocyte Growth Factor-like Protein antibody, Macrophage Stimulating Protein 1 antibody, MST1 Polyclonal antibody

Copyright © NSJ Bioreagents. All rights reserved.