

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MSP/MST1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human HGF is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human MSP/MST1 Gln19-Gly711 Accession # AAA59872
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Macrophage stimulating protein (MSP), also known as HGF-like protein, and scatter factor-2, is a member of the HGF family of growth factors (1). MSP is secreted as an inactive single chain precursor (pro-MSP) that contains a PAN/APPLE-like domain, four kringle domains, and a peptidase S1 domain which lacks enzymatic activity (2). Human MSP shares 79% aa sequence identity with mouse MSP and 44% aa sequence identity with human HGF. Pro-MSP is secreted by hepatocytes under the positive and negative control of CBP in complex with either HNF-4 or RAR, respectively (3). Circulating pro-MSP is proteolytically cleaved in response to tissue injury to yield biologically active disulfide linked heterodimers consisting of a 45-62 kDa alpha and a 25-35 kDa beta chain (4, 5). Pro-MSP can be activated by MT-SP1, a transmembrane protease that is expressed on macrophages and is upregulated in many cancers (6). Heterodimeric MSP as well as the isolated beta chain bind to MSP R/Ron with high-affinity, although only heterodimeric MSP can induce receptor dimerization and signaling (7, 8). MSP induces macrophage and keratinocyte proliferation and osteoclast activation (9, 10). It also inhibits LPS- or IFN-induced iNOS and IL-12 expression by macrophages and prevents apoptosis of epithelial cells separated from the ECM (11, 12).

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