Active Recombinant Human MST1R protein, His/Avi-tagged, Biotinylated

Cat. No. MST1R-051H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Recombinant Human MST1R(Glu25-Leu571) protein, fused to His/Avi tag at the C-terminus, was expressed in HEK293 cells .
Species	Human
Source	HEK293
ProteinLength	Glu25-Leu571
Description	MST1R, encoded by the human Ron and the mouse Stk, is one of a small family of receptor tyrosine kinases (RTKs) that also includes human Met (the receptor for hepatocyte growth factor) and chicken Sea (1, 2). This family of receptors is synthesized as a single-chain precursors that are cleaved into a mature disulfide-linked heterodimers composed of an extracellular alpha chain and a membrane spanning beta chain with intrinsic tyrosine kinase activity. Biologically active ligands (MSP and HGF) for this family of receptors are also disulfide-linked alpha -beta heterodimers. Human MSPR cDNA encodes a 1400 amino acid (aa) residue precursor protein with a 24 aa signal peptide, a 285 aa residue alpha chain (Glu25-Arg309) and a 1091 aa residue transmembrane beta chain (Gly310-Thr1400). The extracellular domain of MSPR is comprised of an N-terminal sema domain, a PSI (plexin semaphorins integrins) domain, followed by four immunoglobulin-like folds shared by plexins and transcription factors (3). The soluble sema domain binds MSP and inhibits the MSPR-dependent signaling pathways. MSP receptor is expressed in

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	multiple tissues including specific areas of the central and peripheral nervous systems, epithelial cells along the digestive tract, skin and lung, and in subpopulations of the mononuclear phagocyte lineage (1, 2). Although free MSP alpha or beta chains have been shown to bind MSPR, only the heterodimeric MSP can induce receptor activation and cause biological activity (4, 5). MSPR associates with other transmembrane molecules including integrins, cadherins and other cytokine receptors. Transactivation and signaling crosstalk between MSPR and its associated transmembrane receptors have been demonstrated (6-8). Human MSPR shares 72% amino acid sequence identity with mouse MSPR.
Predicted N Terminal	Glu25 (alpha chain) and Gly310 (beta chain)
Form	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.
Bio-activity	Measured by its binding ability in a functional ELISA. When Recombinant Human MST1 (Cys672Ala) is immobilized at 0.5 μg/mL, 100 μL/well, the concentration of Biotinylated Recombinant Human MST1 His-tag Avi-tag that produces 50% of the optimal binding response is approximately 40-240 ng/mL.
Molecular Mass	34-42 kDa & 64-78 kDa, under reducing conditions
Endotoxin	<0.10 EU per 1 μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Bioactivity
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.12 months from date of receipt, -20 to -70 °C as supplied.1 month, 2 to 8 °C under sterile conditions

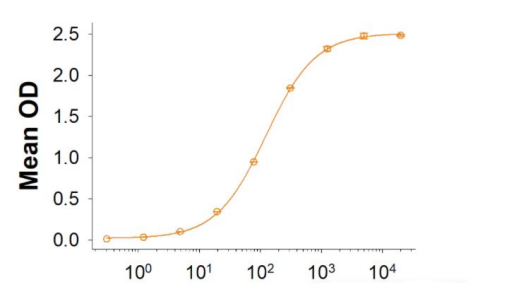
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	after reconstitution.3 months, -20 to -70 °C under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 200 µg/mL in PBS.
Conjugation	Biotin

GENE INFORMATION

Gene Name	MST1R macrophage stimulating 1 receptor (c-met-related tyrosine kinase) [Homo sapiens]
Official Symbol	MST1R
Synonyms	MST1R; macrophage stimulating 1 receptor (c-met-related tyrosine kinase); PTK8, PTK8 protein tyrosine kinase 8 , RON; macrophage-stimulating protein receptor; CD136; CDw136; p185-Ron; MSP receptor; RON variant E2E3; MST1R variant RON30; MST1R variant RON62; soluble RON variant 1; soluble RON variant 2; soluble RON variant 3; soluble RON variant 4; c-met-related tyrosine kinase; PTK8 protein tyrosine kinase 8; RON; PTK8;
Gene ID	4486
mRNA Refseq	NM_001244937
Protein Refseq	NP_001231866
MIM	600168
UniProt ID	Q04912

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Binding Activity	

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