Recombinant RON protein (His tag)

Catalog Number	542556
Synonyms	MSP receptor; CDw136; Protein-tyrosine kinase 8; p185-Ron; CD antigen CD136
Species	Human
Expression System	E. coli
Accession	Q04912
Molecular Weight	Predictes a molecular mass of 31.34 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	25-304
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 25-304 aa (Q04912) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Macrophage-stimulating protein receptor (MSP receptor) fragment (residues 25-304) is a high-purity, soluble protein designed for structural and functional studies. This 280-amino acid fragment, derived from the extracellular domain, retains key structural features and is ideal for investigating receptor-ligand interactions, kinase activity, and signaling mechanisms in wound healing and immune responses. The Macrophage-stimulating protein receptor (MSP receptor), encoded by the MST1R gene, is a receptor tyrosine kinase (EC 2.7.10.1) that transduces signals from the extracellular matrix by binding to its ligand, MST1. It regulates critical physiological processes, including cell survival, migration, and differentiation, and is integral to wound healing by promoting epithelial cell proliferation and migration. Additionally, it modulates the innate immune response through macrophage migration and phagocytic activity. Upon ligand binding, RON undergoes autophosphorylation, recruiting downstream effectors like PIK3R1, PLCG1, and GAB1 to activate signaling pathways such as RAS-ERK, PI3K-AKT, and PLCγ-PKC. The full-length protein is a single-pass type I membrane protein localized to the cell membrane, where it facilitates communication between the extracellular environment and intracellular signaling cascades.