Human RON / MSPR Protein, His Tag (MALS verified)

Catalog # RON-H52H9

Synonym

CD136 antigen,CD136,CDw136c-met-related tyrosine kinase,EC 2.7.10,EC 2.7.10.1,macrophage stimulating 1 receptor (c-met-related tyrosine kinase),MSP R,MSP receptor,MSPR,MST1R,p185-Ron,Protein-tyrosine kinase 8,PTK8 protein tyrosine kinase 8,PTK8,Ron,RONmacrophage-stimulating protein receptor,RON

Source

Human RON, His Tag(RON-H52H9) is expressed from human 293 cells (HEK293). It contains AA Glu 25 - Leu 571 (Accession # Q04912-1).

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 60.7 kDa. This protein contains a furin cleavage site, 306-RRRR-309, and will be processed into disulfide-linked alpha chain and partial beta chain, with calculated MW of 30.6 kDa (alpha chain) and 30.1 kDa (partial beta chain), respectively. The protein migrates as 33-35 kDa and 36-43 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

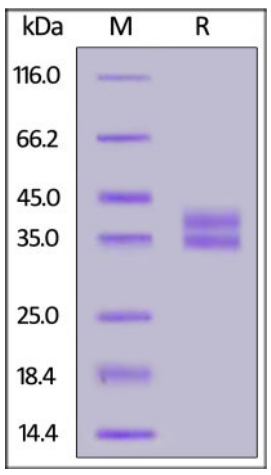
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

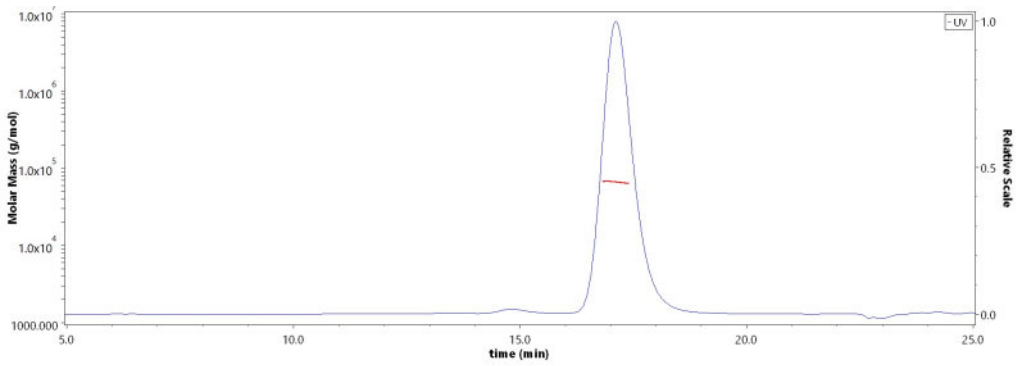
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human RON, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Human RON, His Tag (Cat. No. RON-H52H9) is more than 90% and the molecular weight of this protein is around 60-80 kDa verified by SEC-MALS.
Report

Background

Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to MST1 ligand. Regulates many physiological processes including cell survival, migration and differentiation. Ligand binding at the cell surface induces autophosphorylation of RON on its intracellular domain that provides

docking sites for downstream signaling molecules. Following activation by ligand, interacts with the PI3-kinase subunit PIK3R1, PLCG1 or the adapter GAB1. Recruitment of these downstream effectors by RON leads to the activation of several signaling cascades including the RAS-ERK, PI3 kinase-AKT, or PLCgamma-PKC. RON signaling activates the wound healing response by promoting epithelial cell migration, proliferation as well as survival at the wound site. Plays also a role in the innate immune response by regulating the migration and phagocytic activity of macrophages. Alternatively, RON can also promote signals such as cell migration and proliferation in response to growth factors other than MST1 ligand.

Clinical and Translational Updates