

Human Oncostatin M/OSM Protein

Cat. No. ONM-HM401

Description

Source	Recombinant Human Oncostatin M/OSM Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Ala26-Arg221.
Accession	P13725
Molecular Weight	The protein has a predicted MW of 25.1 kDa. Due to glycosylation, the protein migrates to 30-40 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

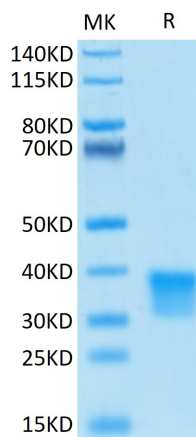
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

OSM is a pleiotropic cytokine that initiates its biological activities by binding to specific cell surface receptors. Inhibits the proliferation of a number of tumor cell lines. Stimulates proliferation of AIDS-KS cells. It regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells. Uses both type I OSM receptor (heterodimers composed of LIFR and IL6ST) and type II OSM receptor (heterodimers composed of OSMR and IL6ST). Involved in the maturation of fetal hepatocytes, thereby promoting liver development and regeneration.

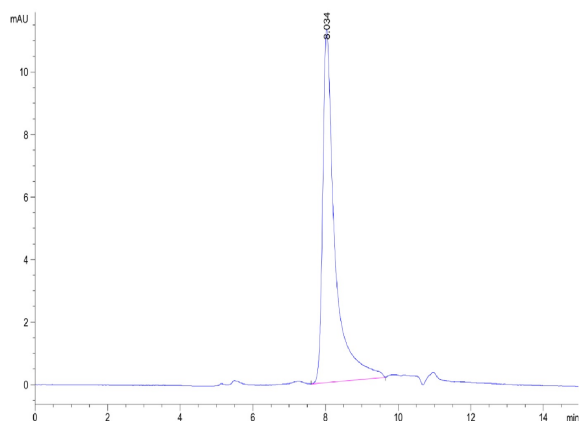
Assay Data

Bis-Tris PAGE



Human OSM on Bis-Tris PAGE under reduced conditions. The purity is greater than 95%.

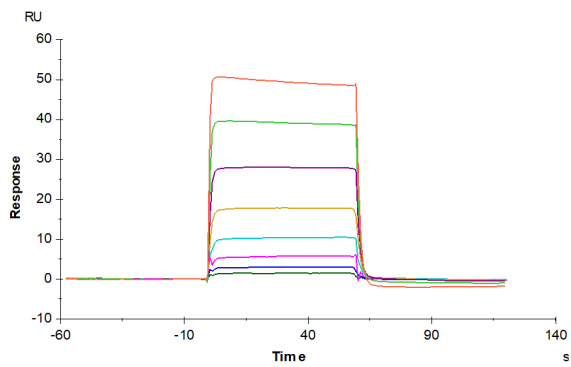
SEC-HPLC



The purity of Human OSM is greater than 95% as determined by SEC-HPLC.

Assay Data

SPR Data



Human LIF R, His Tag immobilized on CM5 Chip can bind Human OSM, His Tag with an affinity constant of 0.662 μ M as determined in SPR assay (Biacore T200).