

Recombinant Human OSM protein

Cat. No. OSM-513H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human OSM protein (Ala26-Arg252) carries no tag and was expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	227
Description	Oncostatin M is also known as OSM, is a glycoprotein belonging to the interleukin-6 family of cytokines that has functions mainly in cell growth. Of these cytokines it most closely resembles leukemia inhibitory factor (LIF) in both structure and function. However, it is as yet poorly defined and is proving important in liver development, haematopoiesis, inflammation and possibly CNS development. It is also associated with bone formation and destruction. OSM signals through cell surface receptors that contain the protein gp130. The type I receptor is composed of gp130 and LIFR, the type II receptor is composed of gp130 and OSMR. Oncostatin M (OSM) was previously identified by its ability to inhibit the growth of cells from melanoma and other solid tumors. It also has been reported that OSM, like LIF, IL-6 and G-CSF, has the ability to inhibit the proliferation of murine M1 myeloid leukemic cells and can induce their differentiation into macrophage-like cells. The human form of OSM is insensitive between pH2 and 11 and resistant to heating for one hour at 56 degree but is not stable at 90 degrees. The three dimensional structure of human OSM has been solved to atomic resolution, confirming the predicted long chain four helix

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	bundle topology. Comparing this structure with the known structures of other known LC cytokines shows it to be most closely related to LIF.
Form	Lyophilized from 0.22 um filtered solution in PBS, pH7.4, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 25.8 kDa. The protein migrates as 36 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 1.0 EU per ug by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name	OSM
Official Symbol	OSM
Synonyms	OSM; oncostatin M; oncostatin-M; MGC20461
Gene ID	5008

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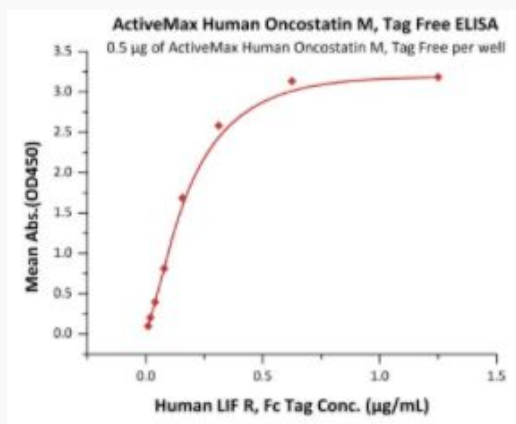
mRNA Refseq [NM_020530](#)

Protein Refseq [NP_065391](#)

MIM [165095](#)

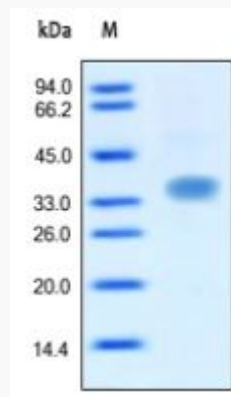
UniProt ID [P13725](#)

Bioactivity-ELISA of OSM-513H



Immobilized Human Oncostatin M, Tag Free at 5 µg/mL (100 µL/well) can bind Human LIF R, Fc Tag with a linear range of 0.01-0.156 µg/mL (QC tested).

SDS-PAGE of OSM-513H



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

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