Recombinant Human OSM Protein, Tag Free

Cat. No. OSM-11130H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human Oncostatin M (OSM) (26-221) Protein, premium grade is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Arg 221 (Accession # P13725). This protein carries no "tag". Predicted N-terminus: Ala 26
Species	Human
Source	HEK293
ProteinLength	26- 221 aa
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, haematopoeisis, 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 previoustly 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

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	been solved to atomic resolution, confirming the predicted long chain four helix 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 μm filtered solution in PBS, pH7.4 with trehalose as protectant.
Specificity	Sterility: Negative Mycoplasma: Negative
Molecular Mass	The protein has a calculated MW of 22.2 kDa. The protein migrates as 25-30 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 0.1 EU/μg by the LAL method/rFC method.
Purity	>90% as determined by SDS-PAGE. >90% as determined by SEC-MALS.
Storage	This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 μg/μL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

GENE INFORMATION

Gene Name	OSM oncostatin M [Homo sapiens (human)]
Official Symbol	OSM
Synonyms	OSM; oncostatin M; oncostatin-M; MGC20461;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	5008
mRNA Refseq	NM_020530
Protein Refseq	NP_065391
MIM	165095
UniProt ID	P13725

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA