

OSM active protein

Recombinant Human OSM

CATALOG #
AAA214249

HOST
E Coli

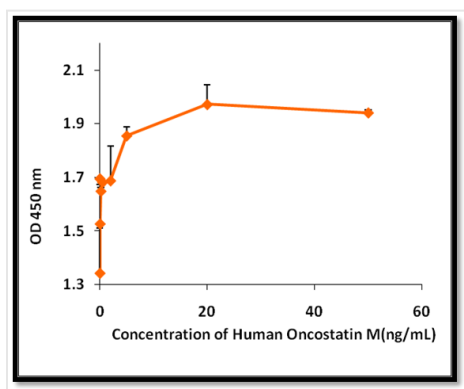
PRODUCT SYNONYMS

OSM; Recombinant Human OSM; Oncostatin M; OSM active protein

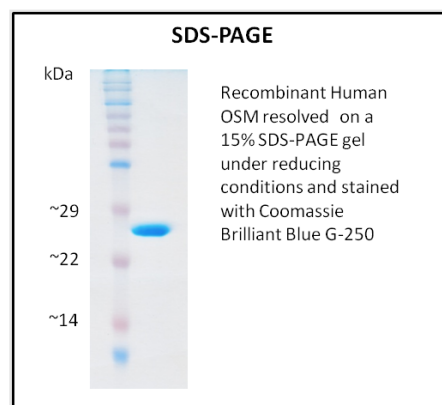
PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	>95% as determined by SDS-PAGE
Form/Format	Lyophilized from a 0.2 um filtered concentrated (1.0 mg/mL) PBS solution, pH 7.0.
Sequence Length	252
Bioactivity	The ED(50) was determined by the dose-dependent stimulation of the proliferation of f human TF-1 cells is ≤ 3.0 ng/mL, corresponding to a specific activity of $\geq 2.0 \times 10^5$ units/mg.
Endotoxin Level	<1.0 EU/ug of recombinant protein as determined by the LAL method.
Reconstitution	A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.
Preparation and Storage	The lyophilized protein is stable for at least one year from date of receipt at -70 degree C. Upon reconstitution, this cytokine can be stored in working aliquots at 2-8 degree C for one month, or at -20 degree C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for OSM active protein	Oncostatin M is produced by monocytes and T cells after cell activation, adherent macrophages, and various T cell lines. Oncostatin M is a member of the IL-6-related cytokine subfamily that includes IL-6, IL-11, LIF, CNTF and CT-1. Oncostatin M mediates its bioactivities through two different heterodimer receptors. They both involve gp130 as a signal transducing moiety, which is found also in receptors for a number of other cytokines. When gp130 dimerizes with LIF receptor beta subunit this generates the high affinity type 1 OSM receptor. When gp130 dimerizes with a protein known as OSM receptor beta this generates the type 2 OSM receptor. Both OSM receptors activate the receptor-associated Janus kinases JAK1, JAK2, and TYK2. Signaling also involves the transcriptional activators STAT3 and STAT5b (see also: STAT proteins) were specifically activated through the gp130-OSM-R-beta type II heterocomplex. The signaling pathway differences observed between the common type I LIF/OSM receptor and the specific type II OSM receptor might explain some of the bioactivities specifically displayed by OSM. Oncostatin M inhibits the growth of several tumor cell lines (A375 melanoma, lung carcinomas). The antiproliferative activity of oncostatin M for some cell lines is synergised by TGF-beta and IFN-gamma. It promotes the growth of human fibroblasts, vascular smooth muscle cells, and some normal cell lines. Oncostatin can inhibit the proliferation of murine M1 myeloid leukemic cells and induces their differentiation into macrophage-like cells, a function shared by LIF, G-CSF, and IL-6.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	10092621
NCBI GeneID	5008
NCBI Accession #	NP_065391.1
NCBI GenBank Nucleotide #	NP_065391.1
UniProt Accession #	P13725
Molecular Weight	26.0 kDa
NCBI Official Full Name	oncostatin-M isoform 1 preproprotein
NCBI Official Synonym Full Names	oncostatin M
NCBI Official Symbol	OSM
NCBI Protein Information	oncostatin-M
UniProt Protein Name	Oncostatin-M
UniProt Gene Name	OSM
UniProt Synonym Gene Names	OSM
UniProt Entry Name	ONCM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.