OSM
Recombinant Human Oncostatin M (His Tag)

Catalog No.	CRH486A-His CRH486B-His	**Quantity:**	20 µg 100 µg
Alternate Names:	Oncostatin-M, OSM		
Description:	Oncostatin M (OSM) is a glycoprotein belonging to the interleukin-6 family of cytokines that has functions mainly in cell growth. OSM is considered as a pleiotropic cytokine that signals through cell surface receptors type I and type II both of which share the cell similarity of containing protein gp13 and takes part in many biometabolism processes including liver development, haematopoeisis, inflammation, bone formation and destruction and possibly CNS development. 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 9 degrees. The human OSM is produced as a precursor containing 252 amino acids, whose first 25 amino acids function as a secretory signal peptide and which on removal yields the soluble 227 amino acid pro-OSM. Removal of the C-teminal most 31 amino acids produces the fully active 196 residue form.		
UniProt ID:	P13725		
Accession Number:	NP_065391.1		
Protein Construction:	A DNA sequence encoding the mature form of human OSM (Met 1-Arg 221) was expressed, fused with a polyhistidine tag at the C-terminus.		
Source:	HEK293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The recombinant human OSM consists of 207 amino acids and has a predicted molecular mass of 23.6 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhOSM is approximately 32-35 kDa due to glycosylation.		
Purity:	> 95 % as determined by SDS-PAGE		
Endotoxin Level:	< 1.0 EU per µg protein as determined by the LAL method.		
Biological Activity:	1. Measured by its binding ability in a functional ELISA. Immobilized human OSM-His at 10 µg/ml (100 µl/well) can bind biotinylated human LIFR-His with a linear range of 0.031 -0.5 µg/ml. 2. Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 0.5-2.5 ng/ml.		
Predicted N-terminal:	Ala 26		

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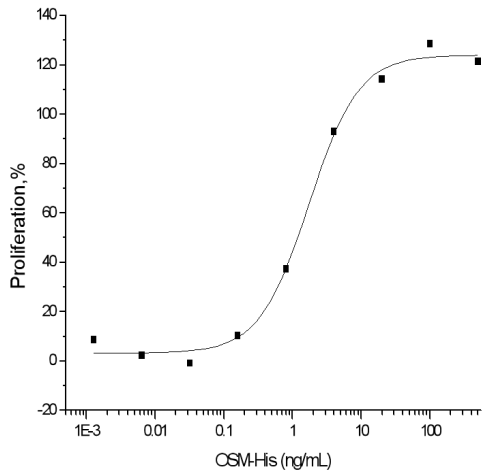
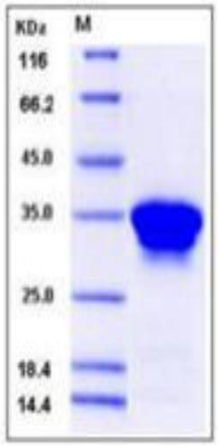
Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX**. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is typically 0.5-2.5 ng/ml.



SDS-PAGE



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