

Recombinant Human OSM (N-6His)

Catalog No.: RP0087

Basic Information

Information

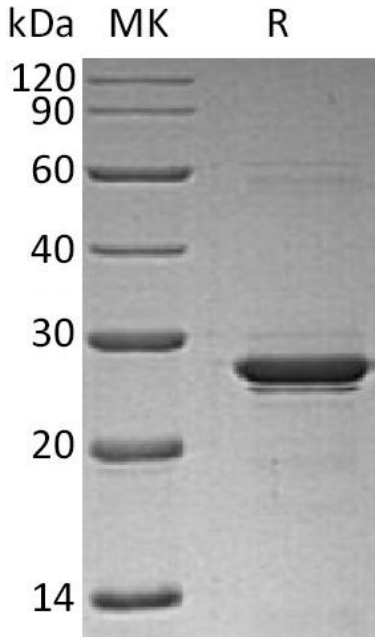
Source	<i>E.coli</i>
Description	Recombinant Human Oncostatin M is produced by our E.coli expression system and the target gene encoding Ala26-Arg221 is expressed with a 6His tag at the N-terminus.
Accession	P13725
Known As	Oncostatin-M; OSM
Predicted Mol Mass	24.44 KDa
Apparent Mol Mass	28 KDa, reducing conditions

Properties

Formulation	Lyophilized from a 0.2 μ m filtered solution of 20mM Tris-HCl, 1mM EDTA, 200mM NaCl, pH 7.5.
Storage	Lyophilized protein should be stored at $\leq -20^{\circ}\text{C}$, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8 $^{\circ}\text{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $\leq -20^{\circ}\text{C}$ for 3 months.
Endotoxin	< 0.01 EU/ μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{ml}$. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

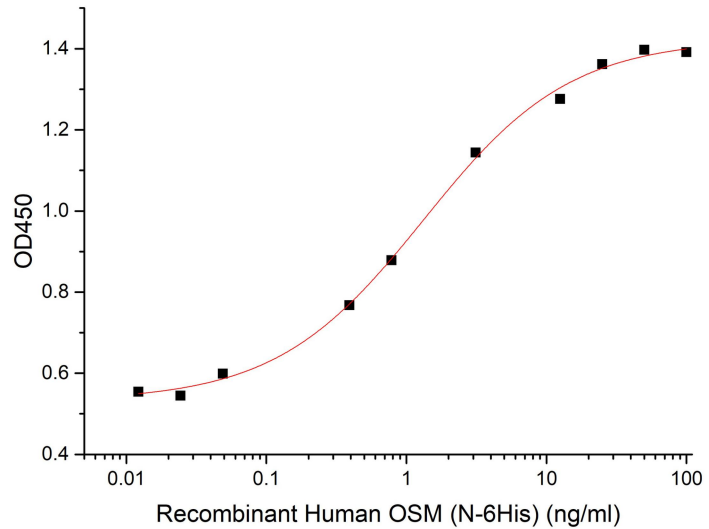
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured by the dose-dependent stimulation of TF-1 cells. The ED50 for this effect is 0.2-1 ng/ml. (QC verified)

Background

Oncostatin M (OSM) is a glycoprotein belonging to the interleukin-6 family of cytokines that includes leukemia-inhibitory factor, granulocyte colony-stimulating factor, and interleukin 6. OSM encodes a growth regulator, which inhibits the proliferation of a number of tumor cell lines. It stimulates proliferation of AIDS-KS cells. OSM regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells. OSM is considered as a pleiotropic cytokine that initiates its biological activities through specific cell surface receptors. The low affinity LIF receptor that shares the similarity of containing protein gp130 has now been identified to be a component of a high-affinity OSM receptor that will transduce OSM signals. OSM has also been shown to play a role in both pro and anti-inflammatory actions. OSM may also be involved in many biometabolism processes including liver development, haematopoiesis, inflammation, bone formation and destruction and possibly CNS development.