

GFH356 Recombinant Human Oncostatin M

Description

Oncostatin M (OSM) is a cytokine that is produced by macrophages, dendritic cells, and T lymphocytes during inflammatory events. The Type-I and Type-II OSM receptors are located on the cell surface of endothelial and tumor cells, contain the glycoprotein 130 (gp130) subunit, and activate the JAK/STAT signaling pathway. OSM functions to inhibit tumor cell proliferation, induce liver stem cell maturation, regulate cytokine production during hematopoiesis and inflammation, stimulate bone formation, and promote nervous system development.

Length	210 aa
Molecular Weight	23.8 kDa
Source	E. coli
Accession Number	P13725
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

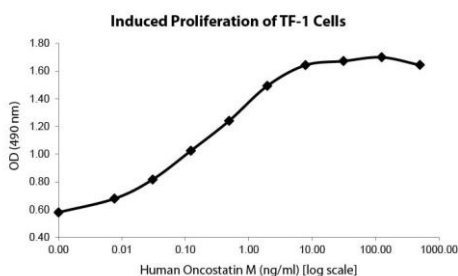
Specifications

Alternative Names	Onc-M
Biological Activity	Human Oncostatin M is fully biologically active when compared to standard. The activity is determined by the ability to induce TF-1 cells proliferation and it is typically less than 4 ng/ml. This corresponds to an expected specific activity of 2.5×10^5 units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	<pre> MAAIGSCSKE YRVLLGQLQK QTDLMQDTSR LLDPYIRIQG LDVPKLREHC RERPGAFPSE ETLRGLGRRG FLQTLNATLG CVLHRLADLE QRLPKAQDLE RSGLNIEDLE KLQMARNIL GLRNNIYCMA QLLDNSDTAE PTKAGRGASQ PPTPTPASDA FQRKLEGCRF LHGYHRFMHS VGRVFSKWGE SPNRSRRHSP HQALRKGVRR </pre>

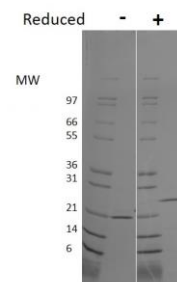
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced proliferation of TF-1 cells assay for Human Oncostatin M. Cell proliferation was measured to calculate the ED50, which is as expected less than 4 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human Oncostatin M has a predicted Mw of 23.8 kDa.