

Rev03
Update: Dec,14,2021

DATASHEET

OSM (227aa), Human

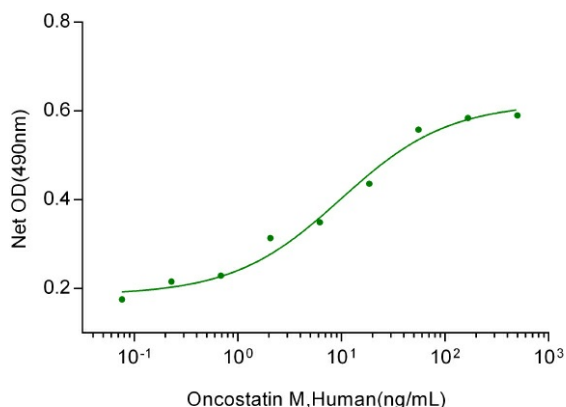
Cat. No.: Z03068

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. <div>OSM (Ala26-Arg252) Accession # P13725</div>
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 10.0 ng/ml, measured by a cell proliferation assay using TF-1 cells, corresponding to a specific activity of > 1.0 × 10 ⁵ units/mg.
Expression System	E. coli
Apparent Molecular Weight	~25.9 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples

ED₅₀ < 10 ng/mL, measured by a cell proliferation assay using TF-1 cells, corresponding to a specific activity of $> 1 \times 10^5$ units/mg.



Background

Target Background : Oncostatin M (OSM) is a multifunctional cytokine, and belongs to Interleukin-6 (IL-6) subfamily, including IL-11, leukemia inhibitory factor (LIF), ciliary neurotropic factor, cardiotrophin-1, and novel neurotrophin-1. In vivo, OSM is secreted from activated T cells, monocytes, neutrophils, and endothelial cells. OSM is related to LIF, and share a receptor with LIF in human. Human OSM can bind to gp130 and recruit OSM Receptor β or LIF Receptor β to form a ternary complex. OSM stimulates the growth of different types of cells, including megakaryocytes, fibroblasts, vascular endothelial cells, and T cells. On the other hand, OSM inhibits the proliferation of several cancer cell lines, such as solid tissue tumor cells, lung cancer cells, melanoma cells, and breast cancer cells.

Synonyms : OncoM; oncostatin M

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.