

Rev03
Update: Dec,14,2021

DATASHEET

OSM (227aa), Human

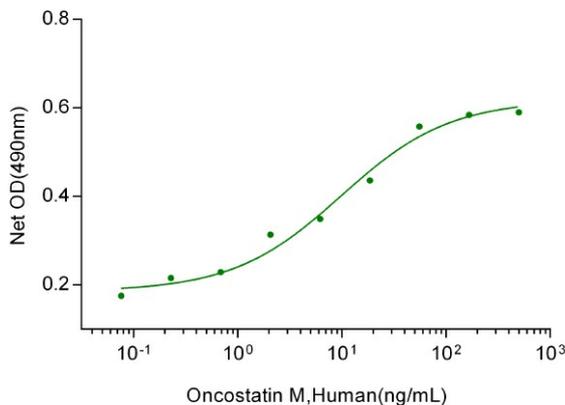
Cat. No.: Z03068

Product Introduction

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| Species | Human |
| Protein Construction | Expressed with an N-terminal Met. OSM (Ala26-Arg252) Accession # P13725 |
| 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 × 10⁵ 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.