

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant OSM (209aa), Human

Catalog Number: BK0146-1mg

Source: Escherichia coli.

Quantity: 1mg

Description:

Oncostatin M (OSM) is a multifunctional cytokine, and belongs to Interleukin-6 (IL-6) subfamily, which also includes 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 shares 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. OSM inhibits the proliferation of several cancer cell lines, such as solid tissue tumor cells, lung cancer cells, melanoma cells, and breast cancer cells. Recombinant human Oncostatin M(209 a.a.) (rhOSM) produced in E. coli is a single non-glycosylated polypeptide chain containing 210 amino acids. A fully biologically active molecule, rhOSM has a molecular mass of 23.8 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Molecular Weight:

23.8 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE and HPLC.

Biological Activity:

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

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) pow-

der.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MAAIG-
SCSKEYRVLLGQLQKQTDLMQDTSRLDPYIRIQ
GLDVPKLRHEHCRERPGAFPSEETLR-
GLGRRGFLQTLNATLGCVLHRLADLEQRL-
PKAQDLERSGLNIEDLEKLQMARPNILGLRN-
NIYCMAQLLDNSDTAEPT-
KAGRGASQPPTPTPASDAFQKLEGCRFLHGY-
HRFMHSVGRVFSKWGESPNRSRRHSPHQAL-
RKGVRR

Endotoxin:

< 0.2 EU/ μ g, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Storage:

Lyophilized recombinant human Oncostatin M(209 a.a.) (rhOSM) remains stable up to 6 months at -80 $^{\circ}$ C from date of receipt. Upon reconstitution, rhOSM should be stable up to 2 weeks at 4 $^{\circ}$ C or up to 3 months at -20 $^{\circ}$ C.

Usage:

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