Datasheet

Cat. No. PH1007

Recombinant Human OSM, Tag Free

General Information

Synonym	MGC20461, Oncostatin M.
Gene ID	5008
Accession #	NP_065391.1
Molecular Characterization	Ala 26 - Arg 252
M.Wt	25.8 kDa
Source	293T 细胞
Bio Activity	Determined by the dose-dependent stimulation of murine CTLL-2 cells: ED50: < 0.1 ng/mL Specific activity: > $1x10^7$units/mg.

Components and Storage

Formulation	The protein is dissolved in PBS buffer.
Storage	This product is stable after storage at: • 4°C for 1 week; • -20°C for 3 months. • **Please avoid repeated freeze-thaw cycles.**

Quality Control

Purity	≥ 95%, by SDS-PAGE and HPLC.
Endotoxin Level	< 0.1 ng/μg

For detail QC information, please see the CoA.

Background

Oncostatin M is also known as OSM, is a glycoprotein belonging to the interleukin-6 family of cytokines that has functions mainly in cell growth. Of these cytokinesit most closely resembles leukemia inhibitory factor (LIF) in both structure and function. However, it is as yet poorly defined and is proving important in liverdevelopment, haematopoeisis, inflammation and possibly CNS development. It is also associated with bone formation and

destruction. OSM signals through cellsurface receptors that contain the protein gp130. The type I receptor is composed of gp130 and LIFR, the type II receptor is composed of gp130 and OSMR.Oncostatin M (OSM) was previoustly identified by its ability to inhibit the growth of cells from melanoma and other solid tumors. It also has been reported thatOSM, like LIF, IL-6 and G-CSF, has the ability to inhibit the proliferation of murine M1 myeloid leukemic cells and can induce their differentiation into macrophage-like cells. The human form of OSM is insensitive between pH2 and 11 and resistant to heating for one hour at 56 degree but is not stable at 90 degrees. The threedimensional structure of human OSM has been solved to atomic resolution, confirming the predicted long chain four helix bundle topology. Comparing this structure with the known structures of other known LC cytokines shows it to be most closely related to LIF.

Reference

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