Datasheet

Cat. No. PM2028

Recombinant Mouse Oncostatin(OSM), Tag Free

Information

Accession #	P53347
Alternate Names	MGC20461; oncostatin M; oncostatin-M; OSM
Source	Human embryonic kidney cell, HEK293-derived mouse Oncostatin M/OSM protein
Protein sequence	Ala24-Arg206
M.Wt	20.5 kDa
Appearance	Solution protein
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. - 12 months from date of receipt, -20 to -70°C as supplied.
Concentration	0. 2 mg/mL
Formulation	Dissolved in sterile PBS buffer.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	The EC50 for this effect is 0.02-1 ng/mL. Measured in a cell proliferation assay using NIH-3T3 mouse embryonic fibroblast cells.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Quality Control

Purity	> 95%, determined by SDS-PAGE.
Endotoxin	<0.010 EU per 1 ug of the protein by the LAL method.

Description

Oncostatin M (OSM) is a member of a cytokine subfamily that includes IL-6, IL-11, LIF, CNTF, and cardiotrophin-1. These cytokines have overlapping biological functions and shared receptor components. Mouse OSM was cloned and identified as an immediate early gene induced in various myeloid and lymphoid cell lines by a subset of cytokines including IL-2, IL-3, GM-CSF and EPO. The mouse OSM cDNA encodes a 263 amino acid residue precursor protein that shows 48% identity with human OSM. Similar to human OSM, the C-terminal region of mouse OSM contains a highly charged region. Deletion of this C-terminal region appears to be essential for the formation of biologically active mOSM.The biological activity of human OSM has been shown to be mediated either by the LIF/OSM receptor complex composed of gp130 and LIF R alpha or by a human OSM specific receptor composed of gp130 and OSM

R alpha. It remains to be determined if the biological activities of mouse OSM can also be mediated by both receptor complexes in mouse cells.

Reference

[1]. Yoshimura, A. et al. (1996) The EMBO Journal 15:1055.

[2]. Ray, P. et al. (1996) Endocrinology 137:1151.

[3]. Rose, T.M. and A.G. Bruce (1994)Oxford University Press, New York, p. 127