

DESCRIPTION

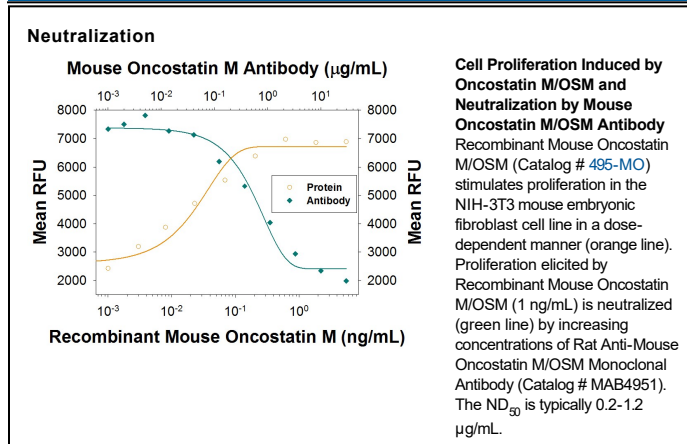
Species Reactivity	Mouse
Specificity	Detects mouse Oncostatin M/OSM in direct ELISAs.
Source	Monoclonal Rat IgG _{2B} Clone # 824157
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse Oncostatin M/OSM Ala24-Arg206 Accession # P53347
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Neutralization	Measured by its ability to neutralize Oncostatin M/OSM-induced proliferation in the NIH-3T3 mouse embryonic fibroblast cell line. The Neutralization Dose (ND ₅₀) is typically 0.2-1.2 µg/mL in the presence of 1 ng/mL Recombinant Mouse Oncostatin M/OSM.
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DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

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 Erythropoietin. 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 mouse OSM. The biological activity of human OSM has been shown to be mediated either by the LIF/OSM receptor complex composed of gp130 and LIF Rα or by a human OSM specific receptor composed of gp130 and OSM Rα. It remains to be determined if the biological activities of mouse OSM can also be mediated by both receptor complexes in mouse cells.

References:

1. Yoshimura, A. *et al.* (1996) *EMBO J.* **15**:1055.
2. Ray, P. *et al.* (1996) *Endocrinology* **137**:1151.
3. Rose, T.M. and A.G. Bruce (1994) in *Guidebook to Cytokines and Their Receptors*, N.A. Nicola, editor, Oxford University Press, New York, p. 127.