

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse OSM R β in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) CLC, rhCNTF, rhOSM, recombinant mouse (rm) CT-1, rML-6, rML-11, or rMLIF is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 118125
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse OSM R β Glu24-Leu738 Accession # O70458
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS and NaCl with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

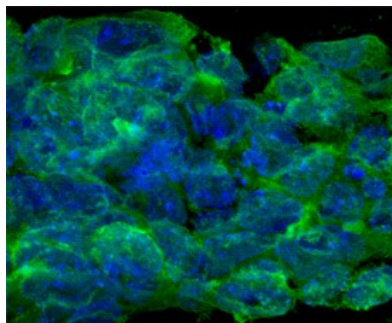
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	Recombinant Mouse OSM R β Fc Chimera (Catalog # 662-OR)
Flow Cytometry	2.5 μ g/10 ⁶ cells	D3 mouse embryonic stem cell line
Immunocytochemistry	8-25 μ g/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Immunocytochemistry



OSM R β in D3 Mouse Cell Line.

OSM R β was detected in immersion fixed D3 mouse embryonic stem cell line using Rat Anti-Mouse OSM R β Monoclonal Antibody (Catalog # MAB662) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Rat IgG Secondary Antibody (green; Catalog # NL015) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and plasma membrane. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

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 the IL-6 family of cytokines that share the gp130 as a common signal transducing receptor subunit. Human OSM signals through two types of human OSM receptor complexes: the type I complex comprising the leukemia inhibitory factor receptor beta (LIF R β) and gp130, the type II complex made up of OSM receptor beta (OSM R β) and gp130. In contrast, mouse OSM signals only through the mouse OSM R β and gp130 complex. Mouse OSM R β cDNA encodes a 971 amino acid (aa) type I transmembrane protein which contains a 23 aa signal peptide, an extracellular domain of 714 aa, a transmembrane domain of 20 aa and a 214 aa cytoplasmic domain. Mouse OSM R β alone binds mOSM with low-affinity but forms a high-affinity binding complex in the presence of gp130. Mouse OSM R β is 55% identical at the amino acid sequence level to human OSM R β .

References:

1. Lindberg, R.A. *et al.* (1998) Mol. Cell. Biol. **18**:3357.
2. Tanaka, M. *et al.* (1999) Blood **93**:804.