## SANTA CRUZ BIOTECHNOLOGY, INC.

# OSM (H-210): sc-50296



## BACKGROUND

Oncostatin M (OSM) is a glycoprotein that was originally isolated from the conditioned medium of U-937 human histiocytic leukemia cells that had been induced to differentiate into macrophage-like cells by treatment with phorbol 12-myristate 13-acetate. OSM inhibits the growth of a broad range of human tumor cell lines, but does not influence the growth of normal human fibroblasts. High-affinity binding sites for OSM have been detected on normal and tumor cells, and a receptor has been identified by chemical cross-linking studies. Expression of OSM is greatest in activated monocytic and lymphocytic cell lines and in normal adherent macrophages. Amino acid sequence analysis of OSM has revealed homology with leukemia inhibitory factor (LIF), granulocyte colony stimulating factor (G-CSF) and interleukin-6 (IL-6), all of which affect the growth and differentiation of a broad range of cell types, including those of hematopoietic origin.

### REFERENCES

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- Brown, T.J., et al. 1987. Purification and characterization of cytostatic lymphokines produced by activated human T lymphocytes. J. Immunol. 139: 2977-2983.
- Malik, N., et al. 1989. Molecular cloning, sequence analysis, and functional expression of a novel growth regulator, Oncostatin M. Mol. Cell. Biol. 9: 2847-2853.
- Linsley, P.S., et al. 1989. Identification and characterization of cellular receptors for the growth regulator, Oncostatin M. J. Biol. Chem. 264: 4282-4289.
- Horn, D., et al. 1990. Regulation of cell growth by recombinant Oncostatin M. Growth Factors 2: 157-165.
- Rose, T.M., et al. 1991. Oncostatin M is a member of a cytokine family that includes leukemia-inhibitory factor, granulocyte colony-stimulating factor, and interleukin-6. Proc. Natl. Acad. Sci. USA 88: 8641-8645.
- Gearing, D.P., et al. 1992. The IL-6 signal transducer, gp130: an Oncostatin M receptor and affinity converter for the LIF receptor. Science 255: 1434-1437.

## CHROMOSOMAL LOCATION

Genetic locus: OSM (human) mapping to 22q12.2.

#### SOURCE

OSM (H-210) is a rabbit polyclonal antibody raised against amino acids 26-235 representing mature OSM of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### APPLICATIONS

OSM (H-210) is recommended for detection of precursor and mature oncostatin M of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

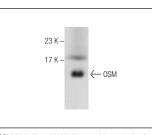
Suitable for use as control antibody for OSM siRNA (h): sc-39689, OSM shRNA Plasmid (h): sc-39689-SH and OSM shRNA (h) Lentiviral Particles: sc-39689-V.

Molecular Weight of OSM: 28 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



OSM (H-210): sc-50296. Western blot analysis of human recombinant OSM.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

MONOS Satisfation Guaranteed

Try **OSM (G-1):** sc-390253 or **OSM (E-4):** sc-365136, our highly recommended monoclonal alternatives to OSM (H-210).