10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

OSM Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14525b

Product Information

Application	WB, E
Primary Accession	P13725
Other Accession	NP_065391.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34395
Calculated MW	28484
Antigen Region	214-243

Additional Information

Gene ID	5008
Other Names	Oncostatin-M, OSM, OSM
Target/Specificity	This OSM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 214-243 amino acids from the C-terminal region of human OSM.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	OSM Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	OSM (HGNC:8506)
Function	Functions as a cytokine that uses both type I OSM receptor (heterodimers composed of LIFR and IL6ST) and type II OSM receptor (heterodimers composed of OSMR and IL6ST) (PubMed:10997905, PubMed:39532904, PubMed:8999038). Functionally, regulates many processes including cell

proliferation, cell differentiation, cytokine production (PubMed:10997905, PubMed:1542792, PubMed:1542793, PubMed:1717982, PubMed:2779549, PubMed:3540948). Mechanistically, low affinity ligand binding to IL6ST/gp130, induces heterodimerization with LIFR or OSMR, activating JAK tyrosine kinases (JAK1 or JAK2 and to a lesser extent TYK2) bound to their intracellular domains (PubMed:9188471). These kinases subsequently phosphorylate IL6ST/gp130 and LIFR or OSMR (PubMed:8999038). The tyrosine phosphorylated signaling receptors serve in turn as docking sites for recruitment and activation of STAT3 (PubMed:9188471). The type II OSM complex receptor is also able in addition to STAT3 to recruit STAT5B (PubMed:9188471). Moreover, the type II OSM complex receptor recruits SHC1 through OSMR in a JAK1 mediated phosphotyrosine-dependent manner, leading to SHC1 association with GRB2 and downstream activation of the Ras/Raf/MAPK pathway (PubMed:11016927).

Cellular Location Secreted

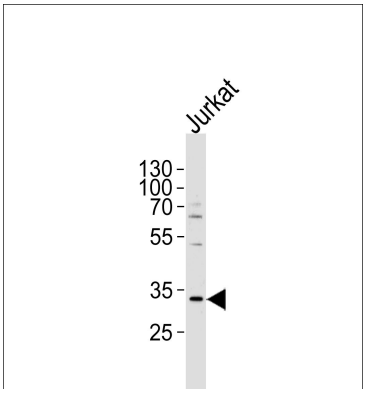
Background

Oncostatin M is a member of a cytokine family that includes leukemia-inhibitory factor, granulocyte colony-stimulating factor, and interleukin 6. This gene encodes a growth regulator which inhibits the proliferation of a number of tumor cell lines. It regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Thorat Manojkumar, S., et al. Cytokine 50(3):248-252(2010)
Pradeep, A.R., et al. Biomarkers 15(3):277-282(2010)
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Lee, G., et al. J. Obstet. Gynaecol. Res. 35(5):869-875(2009)

Images



Western blot analysis of lysate from Jurkat cell line, using OSM Antibody (C-term)(Cat. #AP14525b). AP14525b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.