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Anti-OSM/Oncostatin M Antibody

Catalog # ABO10983

Product Information

Application	WB, IHC-P
Primary Accession	P13725
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Oncostatin-M(OSM) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5008
Other Names	Oncostatin-M, OSM, OSM
Calculated MW	28484
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	Oncostatin-M(OSM)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Oncostatin M(181-198aa ASDAFQRKLEGCRFLHGY).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

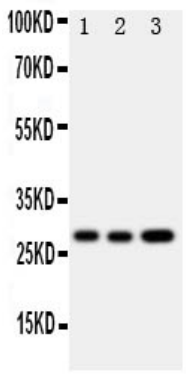
Protein Information

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

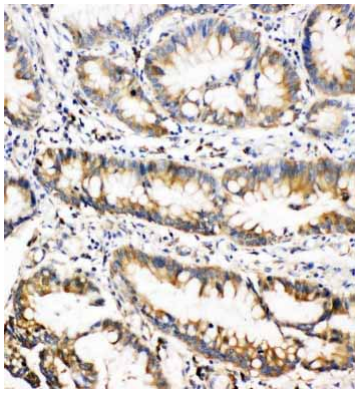
OSM(ONCOSTATIN M) is a member of a cytokine family that includes leukemia-inhibitory factor, granulocyte colony-stimulating factor, and interleukin 6. This gene encodes a growth regulator which inhibits the proliferation of a number of tumor cell lines. It regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells. OSM is mapped on 22q12.2. OSM has the ability to inhibit the growth of human A375 melanoma cells but not normal human fibroblasts. Treatment with recombinant OSM leads to the inhibition of proliferation and changes in cellular morphology of a number of tumor cell lines derived from a wide variety of tissue types. OSM also has the ability to inhibit the proliferation of murine M1 myeloid leukemic cells and can induce their differentiation into macrophage-like cells, a function shared by LIF, CSF3, and IL6. The direction of gene transcription was telomeric to centromeric, with the OSM gene located upstream of the LIF gene.

Images



Anti-Oncostatin M antibody, ABO10983, Western blottingAll lanes: Anti Oncostatin M (ABO10983) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: A549 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 28KDObserved bind size: 28KD

Anti-Oncostatin M antibody, ABO10983, IHC(P)IHC(P):Human Intestinal Cancer Tissue



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