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

OSM Polyclonal Antibody

Catalog # AP74096

Product Information

Application	IHC-P, IF, ICC, E
Primary Accession	P13725
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28484

Additional Information

Gene ID	5008
Other Names	Oncostatin-M (OSM)
Dilution	IHC-P~~IHC-p 1:50-200, ELISA 1:10000-20000 IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

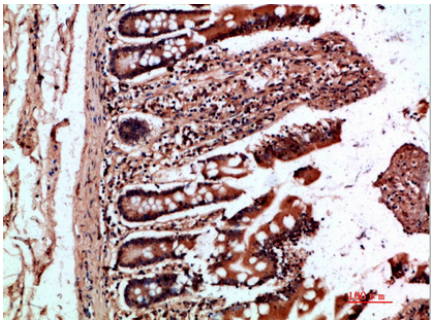
Name	OSM (HGNC:8506)
Function	Functions as a cytokine that uses both type I OSM receptor (heterodimers composed of LIFR and IL6ST) and type II OSM receptor (heterodimers composed of OSMR and IL6ST) (PubMed:10997905, PubMed:39532904, PubMed:8999038). Functionally, regulates many processes including cell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

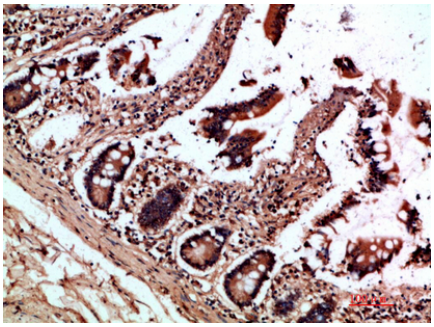
Background

Growth regulator. Inhibits the proliferation of a number of tumor cell lines. Stimulates proliferation of AIDS-KS cells. It regulates cytokine production, including IL-6, G-CSF and GM-CSF from endothelial cells. Uses both type I OSM receptor (heterodimers composed of LIPR and IL6ST) and type II OSM receptor (heterodimers composed of OSMR and IL6ST). Involved in the maturation of fetal hepatocytes, thereby promoting liver development and regeneration (By similarity).

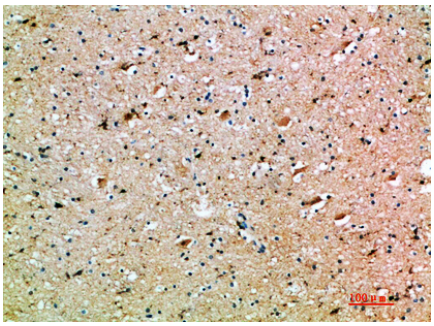
Images



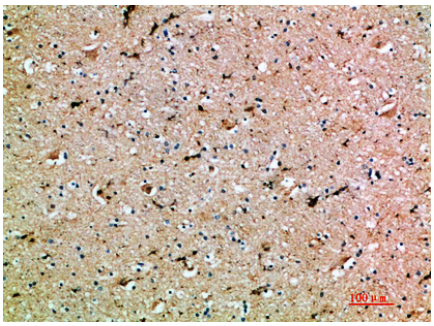
Immunohistochemical analysis of paraffin-embedded human-colon, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-colon, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200

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