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OSMR Rabbit pAb

Catalog # AP98279

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q99650
Other Accession	Q99650
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110509
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human OSMR
Epitope Specificity	571-670/979
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the type I cytokine receptor family. Type 2 subfamily. Contains 4 fibronectin type-III domains.
DISEASE	Amyloidosis, primary localized cutaneous, 1 (PLCA1) [MIM:105250]: A primary amyloidosis characterized by localized cutaneous amyloid deposition. This condition usually presents with itching (especially on the lower legs) and visible changes of skin hyperpigmentation and thickening that may be exacerbated by chronic scratching and rubbing. Primary localized cutaneous amyloidosis is often divided into macular and lichen subtypes although many affected individuals often show both variants coexisting. Lichen amyloidosis characteristically presents as a pruritic eruption of grouped hyperkeratotic papules with a predilection for the shins, calves, ankles and dorsa of feet and thighs. Papules may coalesce to form hyperkeratotic plaques that can resemble lichen planus, lichen simplex or nodular prurigo. Macular amyloidosis is characterized by small pigmented macules that may merge to produce macular hyperpigmentation, sometimes with a reticulate or rippled pattern. In macular and lichen amyloidosis, amyloid is deposited in the papillary dermis in association with grouped colloid bodies, thought to represent degenerate basal keratinocytes. The amyloid deposits probably reflect a combination of degenerate keratin filaments, serum amyloid P component, and deposition of immunoglobulins. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Oncostatin M is a member of the IL6 family of cytokines. Functional receptors for IL6 family cytokines are multisubunit complexes involving members of the hematopoietin receptor superfamily. Many IL6 cytokines utilize gp130 as a common receptor subunit. OSM binds to the gp130 receptor subunit and, in association with the leukemia inhibitory factor receptor, induces a proliferative response in permissive cells. OSMR is an alternative subunit (for an OSM receptor complex (a heterodimer of gp130 and OSMR) that is activated by OSM but not by LIF.

Additional Information

Gene ID	9180
Other Names	IL-31R-beta; IL-31RB; OSMRB; OSMRbeta; PLCA1; OSMR_HUMAN; OSMR; Interleukin-31 receptor subunit beta (IL-31 receptor subunit beta | IL-31R subunit beta | IL-31R-beta | IL-31RB); oncostatin M receptor; Oncostatin-M-specific receptor subunit beta
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	OSMR (HGNC:8507)
Synonyms	OSMRB
Function	Functions as a shared membrane-bound signal-transducing subunit in two distinct receptor complexes, the type II OSM receptor (heterodimer composed of OSMR and IL6ST) and the IL31 receptor complex (heterodimer composed of OSMR and IL31RA) which respectively bind OSM and IL31 (PubMed:15184896, PubMed:15627637, PubMed:8999038). Functionally, OSM signaling via OSMR/IL6ST regulates many processes including cell proliferation, cell differentiation, cytokine production, whereas the IL31 signaling via OSMR/IL31RA is particularly important in skin immunity (PubMed:15184896, PubMed:8999038). Mechanistically, in both the OSM-IL6ST/gp130-OSMR and IL31-IL31RA-OSMR complexes, receptor dimerization activates JAK1 and JAK2 (and to a lesser extent TYK2) associated with the intracellular domains of IL6ST/gp130 and OSMR (or IL31RA and OSMR) (PubMed:15627637, PubMed:8999038, PubMed:9188471). These kinases phosphorylate tyrosine residues on IL6ST/gp130 and OSMR (or IL31RA and OSMR), creating docking sites for STAT1, STAT3, and STAT5B, which are then phosphorylated and activated (PubMed:15627637, PubMed:9188471). In addition, the IL31 receptor complex activates the MAPK pathway (MAPK3/ERK1-MAPK1/ERK2) via recruitment of the adapter protein SHC1 (PubMed:15627637).
Cellular Location	Membrane; Single-pass type I membrane protein
Tissue Location	Expressed in keratinocytes (at protein level) (PubMed:21261663). Expressed at relatively high levels in all neural cells as well as fibroblast and epithelial cells (PubMed:8999038)

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