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CD130 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP11107b

Specification

CD130 Antibody (C-term) Blocking peptide - Product Information

Primary Accession P40189

CD130 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 3572

Other Names
Interleukin-6 receptor subunit beta, IL-6 receptor subunit beta, IL-6R subunit beta, IL-6R-beta, IL-6RB, CDw130, Interleukin-6 signal transducer, Membrane glycoprotein 130, gp130, Oncostatin-M receptor subunit alpha, CD130, IL6ST

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CD130 Antibody (C-term) Blocking peptide - Protein Information

Name IL6ST (HGNC:6021)

Function
Signal-transducing molecule (PubMed:2261637). The receptor systems for IL6, LIF, OSM, CNTF, IL11, CTF1 and BSF3 can utilize IL6ST for initiating signal transmission. Binding of IL6 to IL6R induces IL6ST homodimerization and formation of a high-affinity receptor complex, which activates the intracellular JAK-MAPK and JAK-STAT3 signaling pathways (PubMed:2261637, PubMed:19915009, PubMed:23294003). That causes phosphorylation of IL6ST tyrosine residues which in turn activates STAT3 (PubMed:19915009, PubMed:23294003, PubMed:25731159). In parallel, the IL6 signaling pathway induces the expression of two cytokine receptor signaling inhibitors, SOCS1 and SOCS3, which inhibit JAK and terminate the activity of the IL6 signaling pathway as a negative feedback loop (By similarity). Also activates the yes- associated protein 1 (YAP) and NOTCH pathways to control inflammation- induced epithelial regeneration, independently of STAT3

(By similarity). Acts as a receptor for the neuroprotective peptide humanin as part of a complex with IL27RA/WSX1 and CNTFR (PubMed:19386761). Mediates signals which regulate immune response, hematopoiesis, pain control and bone metabolism (By similarity). Has a role in embryonic development (By similarity). Essential for survival of motor and sensory neurons and for differentiation of astrocytes (By similarity). Required for expression of TRPA1 in nociceptive neurons (By similarity). Required for the maintenance of PTH1R expression in the osteoblast lineage and for the stimulation of PTH-induced osteoblast differentiation (By similarity). Required for normal trabecular bone mass and cortical bone composition (By similarity).

Cellular Location
[Isoform 1]: Cell membrane; Single-pass type I membrane protein

Tissue Location
Found in all the tissues and cell lines examined (PubMed:2261637). Expression not restricted to IL6 responsive cells (PubMed:2261637).

CD130 Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

CD130 Antibody (C-term) Blocking peptide - Images

CD130 Antibody (C-term) Blocking peptide - Background

The protein encoded by this gene is a signal transducershared by many cytokines, including interleukin 6 (IL6), ciliaryneurotrophic factor (CNTF), leukemia inhibitory factor (LIF), andoncostatin M (OSM). This protein functions as a part of thecytokine receptor complex. The activation of this protein isdependent upon the binding of cytokines to their receptors. vIL6, aprotein related to IL6 and encoded by the Kaposi sarcoma-associatedherpesvirus, can bypass the interleukin 6 receptor (IL6R) anddirectly activate this protein. Knockout studies in mice suggestthat this gene plays a critical role in regulating myocyteapoptosis. Alternatively spliced transcript variants encodingdistinct isoforms have been described. A related pseudogene hasbeen identified on chromosome 17.

CD130 Antibody (C-term) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Goette, N.P., et al. Exp. Hematol. 38(10):868-876(2010)Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :Olsen, J.V., et al. Cell 127(3):635-648(2006)Richards, P.J., et al. Arthritis Rheum. 54(5):1662-1672(2006)