

# CD130 Polyclonal Antibody

Catalog # AP68904

#### **Product Information**

**Application** WB, IHC-P, IF **Primary Accession** P40189

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW103537

#### **Additional Information**

**Gene ID** 3572

Other Names IL6ST; 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; CD

antigen CD130

**Dilution** WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **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: 19915009,

PubMed: <u>2261637</u>, PubMed: <u>23294003</u>). 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

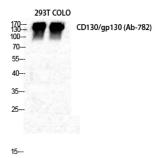
**Tissue Location** Found in all the tissues and cell lines examined (PubMed:2261637).

Expression not restricted to IL6 responsive cells (PubMed:2261637).

## **Background**

Signal-transducing molecule. 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 Janus kinases (PubMed:2261637). That causes phosphorylation of IL6ST tyrosine residues which in turn activates STAT3 (PubMed:19915009, PubMed:23294003). Mediates signals which regulate immune response, hematopoiesis, pain control and bone metabolism (By similarity). Has a role in embryonic development (By similarity). Does not bind IL6 (PubMed:2261637). 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).

### **Images**



Western Blot analysis of 293T COLO cells using CD130 Polyclonal Antibody diluted at 1:500

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