

## CD130/gp130 (Phospho Ser782) Rabbit pAb

Catalog#: AP1242 | Size: 30µL/50µL/100µL

### Main Information

Target	Host Species	Reactivity	Application	MW	Conjugated/Modification
CD130/gp130	Rabbit	Human, Mouse	IHC, IF, WB	130kD (Observed)	Phospho

### Detailed Information

Recommended Dilution Ratio	IHC 1:50-200; WB 1:500-2000; IF 1:50-200
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Specificity	This antibody detects endogenous phospho levels of CD130/gp130 (Phospho-Ser782) at Human:S782, Mouse:S780. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):SEsTQ
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Storage	-15°C to -25°C/1 year (Do not lower than -25°C)
Concentration	1 mg/ml
MW(Observed)	130kD
Modification	Phospho
Clonality	Polyclonal
Isotype	IgG

## Antigen&Target Information

Immunogen	Synthesized peptide derived from human CD130/gp130 (Phospho-Ser782)
Specificity	This antibody detects endogenous phospho levels of CD130/gp130 (Phospho-Ser782) at Human:S782, Mouse:S780. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):SEStQ
Gene Name	IL6ST
Protein Name	CD130/gp130 (Phospho-Ser782)
Other Name	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

## Database Link

Organism	Gene ID	SwissProt
Human	3572	P40189

## Background

The protein encoded by this gene is a signal transducer shared by many cytokines, including interleukin 6 (IL6), ciliary neurotrophic factor (CNTF), leukemia inhibitory factor (LIF), and oncostatin M (OSM). This protein functions as a part of the cytokine receptor complex. The activation of this protein is dependent upon the binding of cytokines to their receptors. vIL6, a protein related to IL6 and encoded by the Kaposi sarcoma-associated herpesvirus, can bypass the interleukin 6 receptor (IL6R) and directly activate this protein. Knockout studies in mice suggest that this gene plays a critical role in regulating myocyte apoptosis. Alternatively spliced transcript variants have been described. A related pseudogene has been identified on chromosome 17. [provided by RefSeq, May 2014].

## Function

Disease:Isoform 2 is an autoantigen found in rheumatoid arthritis (RA) but it is not specific to patients with RA.,Domain:The box 1 motif is required for JAK interaction and/or activation.,Domain:The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.,Function:Signal-transducing molecule. The receptor systems for IL6, LIF, OSM, CNTF, IL11, CTF1 and BSF3 can utilize gp130 for initiating signal transmission. Binds to IL6/IL6R (alpha chain) complex, resulting in the formation of high-affinity IL6 binding sites, and transduces the signal. Does not bind IL6. May have a role in embryonic development (By similarity). The type I OSM receptor is capable of transducing OSM-specific signaling events.,induction:Leukemia inhibitory factor (LIF) and Oncostatin-M (OSM) activate the type I OSM receptor while only OSM can activate the type II OSM receptor.,PTM:Heavily N-glycosylated.,PTM:Phosphorylation of Ser-782 down-regulates cell surface expression.,similarity:Belongs to the type I cytokine receptor family. Type 2 subfamily.,similarity:Contains 1 Ig-like C2-type (immunoglobulin-like) domain.,similarity:Contains 5 fibronectin type-III domains.,subunit:Interacts with INPP5D/SHIP1 (By similarity). Forms heterodimers composed of LIPR and IL6ST (type I OSM receptor). Also forms heterodimers composed of OSMR and IL6ST (type II OSM receptor). Homodimer. The homodimer binds two molecules of herpes virus IL6. Component of a hexamer of two molecules each of IL6, IL6R and IL6ST.,tissue specificity:Found in all the tissues and cell lines examined. Expression not restricted to IL6 responsive cells.

## Cellular Localization

[Isoform 1]: Cell membrane ; Single-pass type I membrane protein .; [Isoform 2]: Secreted.

## Tissue Expression

Found in all the tissues and cell lines examined (PubMed:2261637). Expression not restricted to IL6 responsive cells (PubMed:2261637). ; [Isoform 2]: Expressed in blood serum (at protein level) (PubMed:24629561).

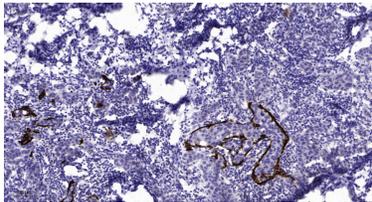
## Research Areas

- Cytokine-cytokine receptor interaction
- Viral protein interaction with cytokine and cytokine receptor
- Signaling pathways regulating pluripotency of stem cells
- JAK-STAT signaling pathway
- Th17 cell differentiation
- Kaposi sarcoma-associated herpesvirus infection
- Coronavirus disease - COVID-19
- Pathways in cancer
- Viral carcinogenesis

## Signaling Pathway

Cellular Processes >> Cellular community - eukaryotes >> Signaling pathways regulating pluripotency of stem cells  
Organismal Systems >> Immune system >> Th17 cell differentiation  
Human Diseases >> Cancer: overview >> Pathways in cancer  
Environmental Information Processing >> Signal transduction >> JAK-STAT signaling pathway  
Environmental Information Processing >> Signaling molecules and interaction >> Cytokine-cytokine receptor interaction  
Environmental Information Processing >> Signaling molecules and interaction >> Viral protein interaction with cytokine and cytokine receptor

## Validation Data



Immunohistochemical analysis of paraffin-embedded human Breast cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-ED-TA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).

## Contact Information

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