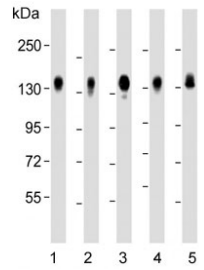
CD130 Antibody / gp130 Antibody (F54230)

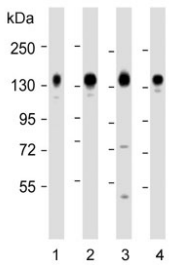
Catalog No.	Formulation	Size
F54230-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54230-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

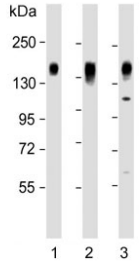
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	P40189
Gene ID	3572
Applications	Western blot: 1:1000-1:2000 Immunohistochemistry (FFPE): 1:25
Limitations	This CD130 Antibody / gp130 Antibody is available for research use only.



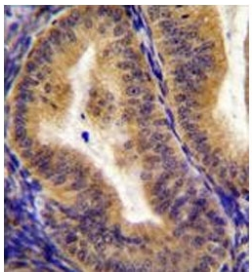
CD130 Antibody Detects gp130 in Multiple Human Cancer Cell Lines WB. Western blot analysis of human cell lysates using CD130 Antibody shows strong, discrete bands within the expected 104-140 kDa range for glycosylated CD130. Lane 1: HeLa cervical cancer cells; lane 2: MDA-MB-231 breast cancer cells; lane 3: HepG2 hepatocellular carcinoma cells; lane 4: SW480 colorectal adenocarcinoma cells; lane 5: A549 lung adenocarcinoma cells. This gp130 Antibody detects closely aligned major bands across all five lysates, with differences in signal intensity but very limited additional background.



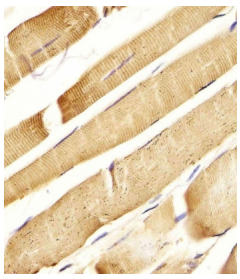
CD130 Antibody Detects gp130 in Human Cancer Cell Lines WB. Western blot analysis of human cell lysates using CD130 Antibody shows prominent bands within the expected 104-140 kDa range. Lane 1: A549 lung adenocarcinoma cells; lane 2: HeLa cervical cancer cells; lane 3: HepG2 hepatocellular carcinoma cells; lane 4: HT-1080 fibrosarcoma cells. Band intensity varies modestly among the samples, while migration remains consistent with glycosylated CD130. This gp130 Antibody produces a predominantly single-band pattern across the four tumor-derived cell lines.



CD130 Antibody Detects IL6ST in Human Cancer Cell Lines WB. Western blot analysis of human cell lysates using CD130 Antibody shows strong major bands within the expected 104-140 kDa range for glycosylated CD130. Lane 1: HepG2 hepatocellular carcinoma cells; lane 2: MDA-MB-231 breast cancer cells; lane 3: SW480 colorectal adenocarcinoma cells. The major bands are well defined and migrate at comparable positions despite differences in intensity. This gp130 Antibody provides additional evidence for detection of IL6ST across these three tumor-derived cell lines.



CD130 Antibody Staining in Human Uterus IHC. Immunohistochemistry staining of FFPE human uterus tissue using CD130 Antibody shows prominent brown staining within glandular epithelial cells, with signal distributed through the cytoplasmic and membranous regions of the epithelium. HIER was performed by steaming tissue sections in pH 6 citrate buffer for 20 min followed by cooling prior to staining. The distinct epithelial staining demonstrates detection of CD130 using this gp130 Antibody in human uterus tissue.



CD130 Antibody Staining in Human Skeletal Muscle IHC. Immunohistochemistry staining of FFPE human skeletal muscle tissue using CD130 Antibody shows strong brown staining throughout the muscle fibers, with the characteristic striated architecture remaining clearly visible. HIER was performed by steaming tissue sections in pH 6 citrate buffer for 20 min followed by cooling prior to staining. The widespread myofiber staining demonstrates detection of CD130 using this gp130 Antibody in human skeletal muscle tissue.

Description

CD130 Antibody recognizes CD130, a transmembrane signaling protein encoded by the IL6ST gene and widely known as gp130. CD130 functions as the common signal-transducing receptor subunit for the interleukin 6 cytokine family. Rather than serving primarily as a ligand-binding receptor, gp130 associates with other receptor components to form functional signaling complexes that respond to cytokines including IL-6, IL-11, leukemia inhibitory factor (LIF), oncostatin M, ciliary neurotrophic factor, and cardiotrophin-1.

IL-6 signaling illustrates the central role of CD130 in this receptor system. IL-6 first binds IL6R (CD126), and the resulting complex recruits gp130 to initiate intracellular signaling. CD130 also participates in IL-6 trans-signaling, in which IL-6 bound to soluble IL6R can stimulate cells expressing gp130 even when membrane-bound IL6R is absent. Because gp130 is broadly expressed, this mechanism can substantially expand the range of cells capable of responding to IL-6.

Activation of gp130-containing receptor complexes stimulates intracellular pathways including JAK-STAT, particularly STAT3, as well as MAPK and PI3K-AKT signaling. These pathways regulate processes such as cell survival, proliferation, differentiation, immune responses, hematopoiesis, and tissue homeostasis. Negative regulators including SOCS proteins help limit gp130-mediated signaling and prevent prolonged cytokine responses.

Dysregulated IL6ST signaling is studied in inflammatory and autoimmune disorders, cancer, and diseases involving altered cytokine responses. Because multiple IL-6 family cytokines converge on this shared receptor component, CD130 occupies an important position linking extracellular cytokine signals with intracellular transcriptional responses. As a gp130 Antibody, this rabbit polyclonal provides a reagent for investigating the common signaling component of IL-6 family receptor complexes. NSJ Bioreagents supplies this antibody for research use only.

A CD130 Antibody can be used to investigate IL6ST expression and molecular mechanisms connecting IL-6 family cytokines with JAK-STAT signaling, immune regulation, inflammation, and cellular responses.

Explore our Signal Transduction Antibodies page for additional antibodies targeting receptors and intracellular mediators involved in cytokine-responsive signaling pathways.

Application Notes

The stated application concentrations are suggested starting points. Titration of the CD130 Antibody / gp130 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 871-899 from the human protein were used as the immunogen for the CD130 antibody.

Storage

Aliquot the CD130 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD130 antibody, gp130 antibody, IL6ST antibody, interleukin 6 signal transducer antibody, interleukin-6 signal transducer antibody, interleukin 6 receptor subunit beta antibody, interleukin-6 receptor subunit beta antibody, IL6RB antibody

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