

Datasheet for ABIN1672730
CD130/gp130 ELISA Kit[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	CD130/gp130 (IL6ST)
Binding Specificity:	AA 24-619
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	125-8000 pg/mL
Minimum Detection Limit:	125 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Gp130/IL6ST
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA), Plasma (citrate)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: sf21 Immunogen sequence: L24-E619
Specificity:	Expression system for standard: sf21 Immunogen sequence: L24-E619
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	CD130/gp130 (IL6ST)
Alternative Name:	IL6ST (IL6ST Products)
Background:	<p>Protein 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. .</p> <p>Background: GP130(Glycoprotein 130) also known as IL6ST or CD130, is a transmembrane protein which is the founding member of the class of all cytokine receptors. The GP130 gene is mapped on 5q11.2. Gp130 showed an apparent molecular mass of 130 kD by SDS-PAGE. Gp130 is involved in the formation of high-affinity IL6-binding sites and in IL6 signal transduction. Sgp130 has a role in modulating signals transduced by membrane-bound gp130. Gp130 is an important part of many different types of signaling complexes. Gp130 Molecules with mutations in either of these segments could not transduce a growth signal.</p> <p>Synonyms: 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,</p> <p>Full Gene Name: Interleukin-6 receptor subunit beta</p> <p>Cellular Localisation: Isoform 1: Cell membrane, Single-pass type I membrane protein.</p>
Gene ID:	3572
UniProt:	P40189
Pathways:	JAK-STAT Signaling , Cellular Glucan Metabolic Process , Autophagy , Smooth Muscle Cell Migration , Cancer Immune Checkpoints

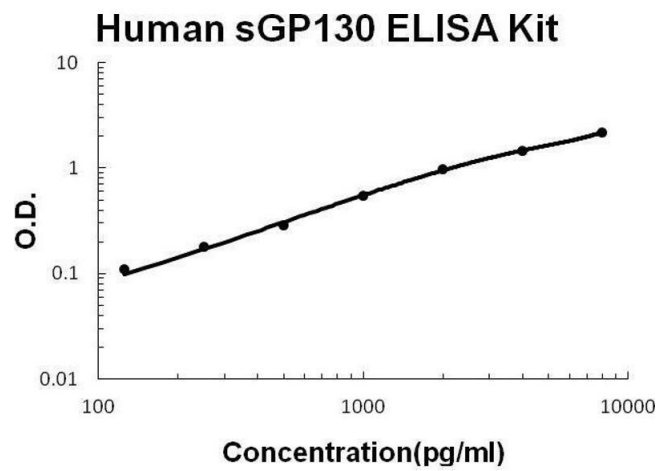
Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
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Application Details

	assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the type I cytokine receptor family. Type 2 subfamily. Tissue Specificity: Found in all the tissues and cell lines examined. Expression not restricted to IL6 responsive cells.
Plate:	Pre-coated
Protocol:	human GP130 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for GP130 has been precoated onto 96-well plates. Standards(sf21, L24-E619) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for GP130 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human GP130 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 8000pg/mL, 4000pg/mL, 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL human GP130 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA, citrate) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human GP130 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 1.1, Standard deviation: 0.052, CV(%): 4.7• Sample 2: n=16, Mean(ng/ml): 3.4, Standard deviation: 0.207, CV(%): 6.1• Sample 3: n=16, Mean(ng/ml): 5.2, Standard deviation: 0.265, CV(%): 5.1,• Sample 1: n=24, Mean(ng/ml): 0.9, Standard deviation: 0.047, CV(%): 5.2• Sample 2: n=24, Mean(ng/ml): 3.5, Standard deviation: 0.252, CV(%): 7.2• Sample 3: n=24, Mean(ng/ml): 5.7, Standard deviation: 0.314, CV(%): 5.5
Restrictions:	For Research Use only
Handling	
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C, 4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months



ELISA

Image 1. Human Gp130/IL6ST PicoKine ELISA Kit standard curve