

Human gp130 ELISA Kit ab246548

Recombinant SimpleStep ELISA[®]

7 Images

Overview

Product name Human gp130 ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Serum	5			6.1%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			2.4%

Sample type Cell culture supernatant, Serum, Hep Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 24.8 pg/ml

Range 62.5 pg/ml - 4000 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	115	114% - 116%
Serum	98	97% - 100%
Hep Plasma	103	101% - 104%
Cit plasma	106	104% - 107%

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Human

Does not react with: Cow**Product overview**

Human gp130 ELISA Kit (ab246548) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of gp130 protein in cell culture supernatant, cit plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human gp130 with 24.8 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties**Storage instructions**

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human gp130 (IL6ST) Capture Antibody	1 x 600µl
10X Human gp130 (IL6ST) Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human gp130 (IL6ST) Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

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.

Tissue specificity

Found in all the tissues and cell lines examined. Expression not restricted to IL6 responsive cells.

Sequence similarities

Belongs to the type I cytokine receptor family. Type 2 subfamily.

Contains 5 fibronectin type-III domains.

Contains 1 Ig-like C2-type (immunoglobulin-like) domain.

Domain

The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding.

The box 1 motif is required for JAK interaction and/or activation.

Post-translational modifications

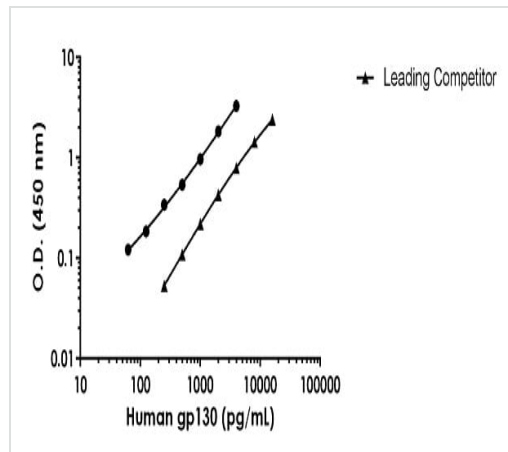
Phosphorylation of Ser-782 down-regulates cell surface expression.

Heavily N-glycosylated.

Cellular localization

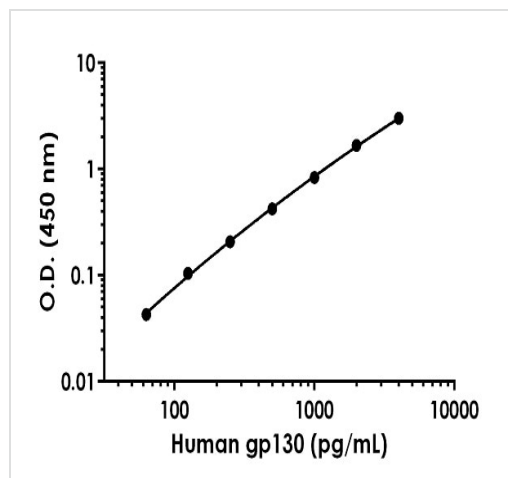
Secreted and Cell membrane.

Images



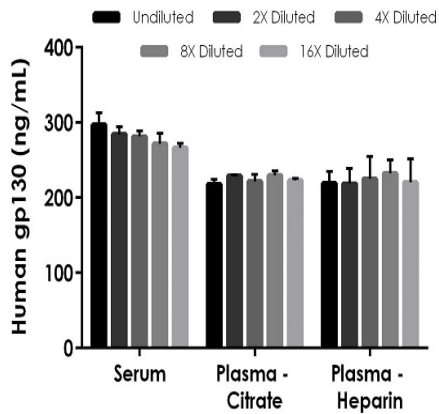
Human gp130 Standard Curve Comparison

Standard Curve comparison between human gp130 SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



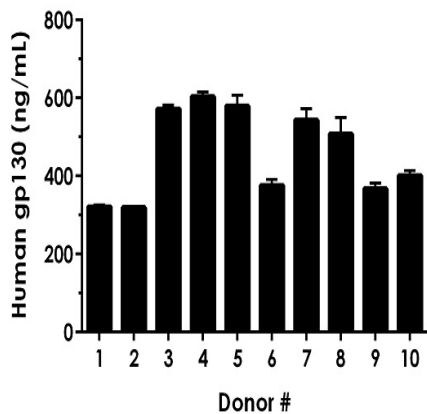
Example of human gp130 standard curve in Sample Diluent NS.

The gp130 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



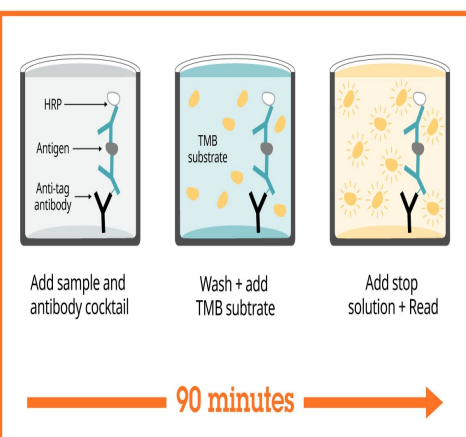
Interpolated concentrations of native gp130 in human serum and plasma samples.

The concentrations of gp130 were measured in duplicates, interpolated from the gp130 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 0.75%, plasma (citrate) 0.75%, plasma (heparin) 0.75% and PBMC supernatant 50%. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2). The mean gp130 concentration was determined to be 280 ng/mL in serum, 224 ng/mL in plasma (citrate) and 223 ng/mL in plasma (heparin).



Serum from ten individual healthy human female donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean \pm SD, n=2). The mean gp130 concentration was determined to be 459 ng/mL with a range of 320-604 ng/mL.



Sandwich ELISA - Human gp130 ELISA Kit (ab246548)

SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Powered by
recombinant antibodies



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Human gp130 ELISA Kit
(ab246548)

To learn more about the advantages of recombinant antibodies see [here](#).

**Get more done with
SimpleStep ELISA**



Easy to use
Single-wash 90-minute protocol



Flexible
Matched antibody pairs available



Precision antibodies
High sensitivity, specificity and reproducibility



Scalable
Now in 10-pack and 384-well formats

Sandwich ELISA - Human gp130 ELISA Kit
(ab246548)

To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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