

For Research Use Only

Rat gp130/IL6ST Recombinant antibody, PBS Only (Detector)

Catalog Number: 84113-5-PBS



Basic Information

Catalog Number:

84113-5-PBS

Size:

100ug, Concentration: 2 mg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_001008725.3

GeneID (NCBI):

25205

UNIPROT ID:

P40190

Full Name:

interleukin 6 signal transducer

Calculated MW:

102 kDa

Observed MW:

90-150 kDa

Purification Method:

Protein A purification

CloneNo.:

241340A11

Applications

Tested Applications:

WB, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:

rat

Product Information

84113-5-PBS targets gp130/IL6ST as part of a matched antibody pair:

MP01049-4: 84113-2-PBS capture and 84113-5-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

Glycoprotein 130 (gp130, also known as IL6ST, CD130 or IL6-beta) is a ubiquitously expressed, signal-transducing receptor that serves as the signal transduction unit for IL-6 family of cytokines, including IL-6, IL-11, IL-27, leukemia inhibitory factor (LIF), OSM, ciliary neurotrophic factor (CNTF), cardiotrophin 1 (CT-1), and cardiotrophin-like cytokine (CLC) (PMID: 9143707; 20610800). These cytokines signal through the gp130/Jak/STAT pathway (PMID: 9716487). The binding of IL-6 to IL-6R induces gp130 homodimerization and formation of a high-affinity receptor complex, which activates Jaks. That causes phosphorylation of gp130 tyrosine residues which in turn activates STAT3. gp130 is a type I transmembrane protein, and can also exist as a soluble form (sgp130). sgp130 binds to sIL-6R/IL-6 complexes and prevents their interactions with membrane-anchored gp130 on target cells (PMID: 9815830).

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

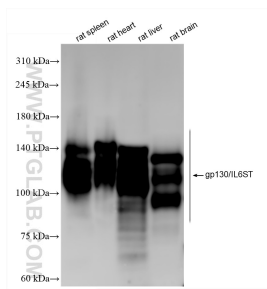
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

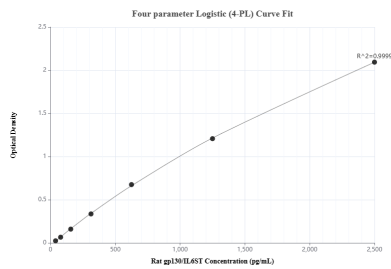
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

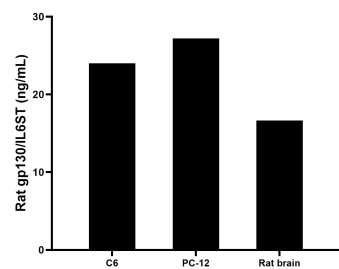
Selected Validation Data



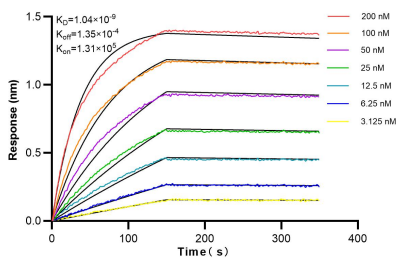
Various lysates were subjected to SDS PAGE followed by western blot with 84113-5-RR (gp130/IL6ST antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84113-5-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP01049-4, Rat gp130/IL6ST Recombinant Matched Antibody Pair - PBS only. 84113-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0857. 84113-5-PBS was HRP conjugated as the detection antibody. Range: 78.1-2500 pg/mL



The mean gp130/IL6ST concentration was determined to be 24.02 ng/mL in C6 cell extract based on a 2.0 mg/mL extract load, 27.20 ng/mL in PC-12 cell extract based on a 1.4 mg/mL extract load and 16.64 ng/mL in rat brain tissue extract based on a 1.6 mg/mL extract load.



Biolayer interferometry (BLI) kinetic assays of 84113-5-RR against Rat gp130/IL6ST were performed. The affinity constant is 1.04 nM.