## For Research Use Only

## PDGFR alpha/CD140a Recombinant antibody, PBS Only (Detector)

Catalog Number: 98141-1-PBS



**Basic Information** 

Catalog Number: 98141-1-PBS GenBank Accession Number:

BC015186

Purification Method: Protein A purfication

Size:

GeneID (NCBI): 5156 CloneNo.: 241658H4

1mg, 2 mg/ml Source:

UNIPROT ID: P16234

Rabbit Isotype:

Full Name: platelet-derived growth factor

receptor, alpha polypeptide

Calculated MW: 123 kDa

**Applications** 

**Tested Applications:** 

FC, Cytometric bead array, Sandwich ELISA, Indirect

ELISA, Sample test

Species Specificity:

human

**Product Information** 

98141-1-PBS targets PDGFR alpha/CD140a as part of a matched antibody pair.

MP01256-1: 84383-5-PBS capture and 98141-1-PBS detection (validated in Cytometric bead array)

MPO1256-4: 84383-7-PBS capture and 98141-1-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.

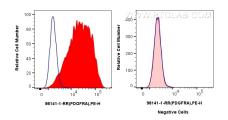
**Background Information** 

Platelet-derived growth factor receptor alpha (PDGFR alpha, also known as CD140a) is a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. PDGFRA is implicated in the regulation of embryonic development, tumorigenesis, cell proliferation, survival, and chemotaxis. Mutations in the PDGFRA gene have been associated with idiopathic hypereosinophilic syndrome, somatic and familial gastrointestinal stromal tumors, and a variety of other cancers.

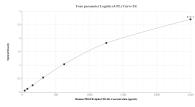
Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

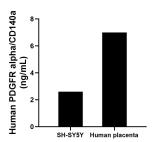
## Selected Validation Data



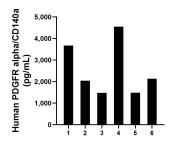
1x10^6 MG-63 cells (left) or A-172 cells (right) were surface stained with 0.25 ug Anti-Human PDGFR alpha/CD140a Rabbit Recombinant Antibody (98141-1-RR, Clone: 241658H4) (red) or Isotype Control (blue), and PE-Conjugated Goat Anti-Rabbit IgG(H+L). Cells were not fixed. This data was developed using the same antibody clone with 98141-1-PBS in a different storage buffer formulation.



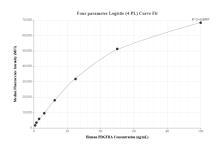
Sandwich ELISA standard curve of MP01256-4, Human PDGFR alpha/CD140a Recombinant Matched Antibody Pair - PBS only. 84383-7-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard RP00003. 98141-1-PBS was HRP conjugated as the detection antibody. Range: 39.1-2500 pg/mL



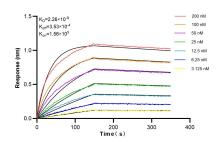
The mean PDGFR alpha/CD140a concentration was determined to be 2.6 ng/mL in SH-SY5Y cell extract based on a 1.0 mg/mL extract load and 7.0 ng/mL in human placenta cell extract based on a 1.7 mg/mL extract load.



Serum of six individual healthy human donors was measured. The PDGFR alpha/CD140a concentration of detected samples was determined to be 2,557.7 pg/mL with a range of 1,472.3-4,545.6 pg/mL



Cytometric bead array standard curve of MP01256-1, PDGFR alpha/CD140a Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84383-5-PBS. Detection antibody: 98141-1-PBS. Standard: RP00003. Range: 0.781-100 ng/mL



Biolayer interferometry (BLL) kinetic assays of 98141-1-RR against Human PDGFR alpha/CD140a were performed. The affinity constant is 2.26 nM.