

For Research Use Only

# PDE5A Recombinant antibody, PBS Only (Detector)

Catalog Number: 85030-1-PBS



## Basic Information

<b>Catalog Number:</b> 85030-1-PBS	<b>GenBank Accession Number:</b> BC126233	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 8654	<b>CloneNo.:</b> 242597B10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O76074	
<b>Isotype:</b> IgG	<b>Full Name:</b> phosphodiesterase 5A, cGMP-specific	
<b>Immunogen Catalog Number:</b> AG18779	<b>Calculated MW:</b> 875 aa, 100 kDa	
	<b>Observed MW:</b> 100 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human, mouse, rat

## Product Information

85030-1-PBS targets PDE5A as part of a matched antibody pair:

MP01762-1: 85030-2-PBS capture and 85030-1-PBS detection (validated in Cytometric bead array)

MP01762-3: 85030-4-PBS capture and 85030-1-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

PDE5A (cGMP-binding cGMP-specific phosphodiesterase) plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. This phosphodiesterase catalyzes the specific hydrolysis of cGMP to 5'-GMP. Through alternative splicing, the PDE5A gene produces three proteins (PDE5A1, PDE5A2, and PDE5A3) that differ in their N termini and range in mass from 89 to 105 kDa. (PMID: 25704994; 21215707). A second 70 kDa band was consistently observed in heart tissue that either reflected a splice variant or proteolytic fragment of PDE5A. (PMID: 15576651).

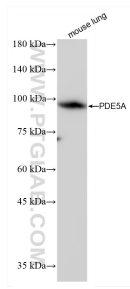
## Storage

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

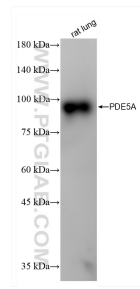
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

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

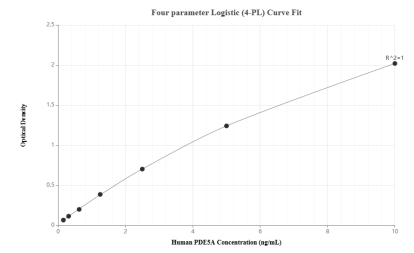
## Selected Validation Data



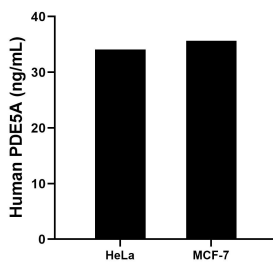
mouse lung tissue were subjected to SDS PAGE followed by western blot with 85030-1-RR (PDE5A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85030-1-PBS in a different storage buffer formulation.



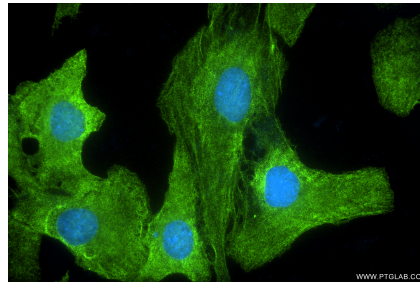
rat lung tissue were subjected to SDS PAGE followed by western blot with 85030-1-RR (PDE5A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85030-1-PBS in a different storage buffer formulation.



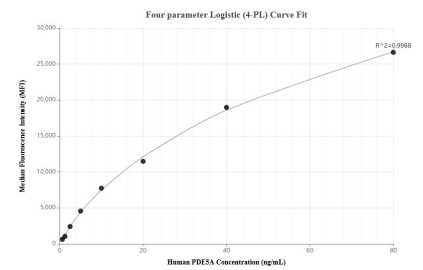
Sandwich ELISA standard curve of MP01762-3, Human PDE5A Recombinant Matched Antibody Pair - PBS only. 85030-4-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag18779. 85030-1-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ng/mL



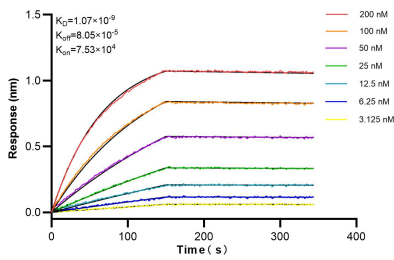
The mean PDE5A concentration was determined to be 34.07 ng/mL in HeLa cell extract based on a 1.5 mg/mL extract load and 35.64 ng/mL in MCF-7 cell extract based on a 1.2 mg/mL extract load.



Immunofluorescent analysis of (4% PFA) fixed SKOV-3 cells using PDE5A antibody (85030-1-RR, Clone: 242597B10) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 85030-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01762-1, PDE5A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85030-2-PBS. Detection antibody: 85030-1-PBS. Standard: Ag18779. Range: 0.625-80 ng/mL



Biolayer interferometry (BLI) kinetic assays of 85030-1-RR against Human PDE5A were performed. The affinity constant is 1.07 nM.