

For Research Use Only

# PDE10A Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 84869-1-PBS



## Basic Information

**Catalog Number:**

84869-1-PBS

**Size:**

100ug, Concentration: 1 mg/ml by Nanodrop;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG12771

**GenBank Accession Number:**

BC104860

**GeneID (NCBI):**

10846

**UNIPROT ID:**

Q9Y233

**Full Name:**

phosphodiesterase 10A

**Calculated MW:**

779 aa, 88 kDa

**Observed MW:**

80 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

242357E12

## Applications

**Tested Applications:**

WB, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**

human, mouse, rat

## Product Information

84869-1-PBS targets PDE10A as part of a matched antibody pair:

MP01645-1: 84869-1-PBS capture and 84869-3-PBS detection (validated in Cytometric bead array)

MP01645-2: 84869-2-PBS capture and 84869-1-PBS detection (validated in Cytometric bead array, 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

PDE10A (Phosphodiesterase 10A) is a single member of the PDE10 protein family, and it catalyzes both cAMP and cGMP hydrolysis (PMID: 34550322). The literature on PDE10A has been focused on psychiatric and neurological disorders because PDE10A expression is enriched in the striatal region of the brain under normal conditions (PMID: 12967715). Moreover, PDE10A expression is induced in various human tumor cell lines and PDE10A inhibition suppresses tumor cell growth (PMID: 37232184).

## Storage

**Storage:**

Store at -80°C.

**Storage Buffer:**

PBS Only

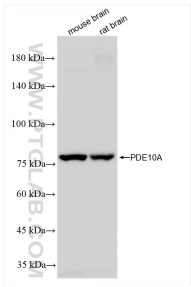
For technical support and original validation data for this product please contact:

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

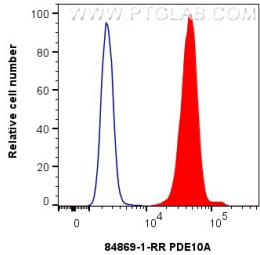
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

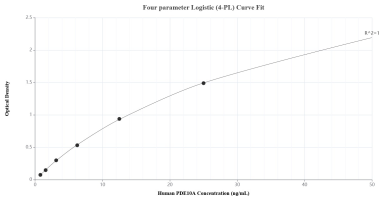
Selected Validation Data



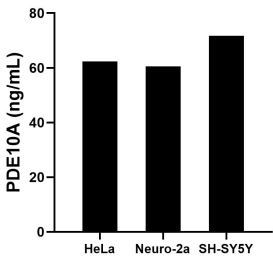
Various lysates were subjected to SDS PAGE followed by western blot with 84869-1-RR (PDE10A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84869-1-PBS in a different storage buffer formulation.



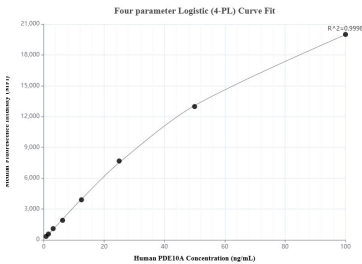
1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug PDE10A Recombinant antibody (84869-1-RR, Clone:242357E12) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84869-1-PBS in a



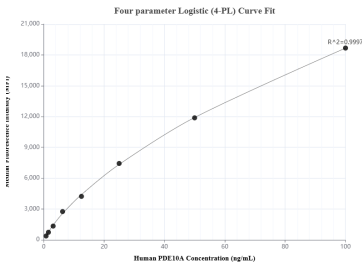
Sandwich ELISA standard curve of MP01645-2, Human PDE10A Recombinant Matched Antibody Pair - PBS only. 84869-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag12771. 84869-1-PBS was HRP conjugated as the detection antibody. Range: 0.781-50 ng/mL



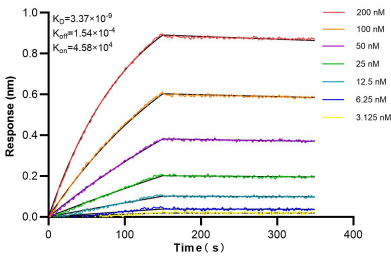
The mean PDE10A concentration was determined to be 62.34 ng/mL in HeLa cell extract based on a 1.00 mg/mL extract load, 60.49 ng/mL in Neuro-2a cell extract based on a 1.50 mg/mL extract load and 71.70 ng/mL in SH-SY5Y cell extract based on a 1.00 mg/mL extract load.



Cytometric bead array standard curve of MP01645-1, PDE10A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84869-1-PBS. Detection antibody: 84869-3-PBS. Standard: Ag12771. Range: 0.781-100 ng/mL



Cytometric bead array standard curve of MP01645-2, PDE10A Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84869-2-PBS. Detection antibody: 84869-1-PBS. Standard: Ag12771. Range: 0.781-100 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84869-1-RR against Human PDE10A were performed. The affinity constant is 3.37 nM.