For Research Use Only

PDE10A Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:84869-1-PBS



Purification Method:

Protein A purification

CloneNo.:

242357E12

Basic Information

Catalog Number: GenBank Accession Number: 84869-1-PBS BC104860 Concentration: GeneID (NCBI):

1 mg/ml 10846 Source: **UNIPROT ID:** Rabbit Q9Y233 Full Name: Isotype:

phosphodiesterase 10A

Calculated MW: Immunogen Catalog Number: AG12771 779 aa, 88 kDa

Observed MW: 80 kDa

Applications

Tested Applications:

WB, FC (Intra), Cytometric bead array, Sandwich ELISA,

Indirect ELISA, Sample test

Species Specificity: human, mouse, rat

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

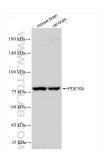
Storage:

Store at -80°C.

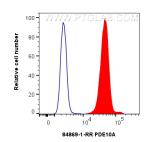
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

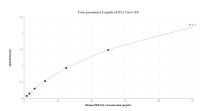
Selected Validation Data



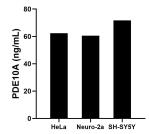
Various lysates were subjected to SDS PAGE followed by western blot with 84869-1-RR (PDE10A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84869-1-PBS in a different storage buffer formulation.



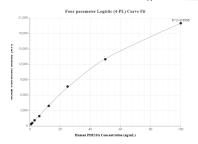
1x10^6 HeLa cells were intracellularly stained with 0.25 ug PDE10A Recombinant antibody (84869-1-RR, Clone:242357E12) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA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



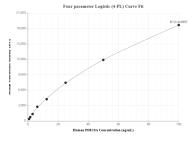
Sandwich ELISA standard curve of MP01645-2, Human PDE10A Recombinant Matched Antibody Pair - PBS only. 84869-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag12771. 84869-1-PBS was HRP conjugated as the detection antibody. Range: 0.781-50 ng/mL



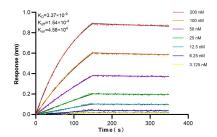
The mean PDE10A concentration was determined to be 62.34 ng/mL in HeLa cell extract based on a 1.00 mg/mL extract load, 60.49 ng/mL in Neuro-2a cell extract based on a 1.50 mg/mL extract load and 71.70 ng/mL in SH-SY5Y cell extract based on a 1.00 mg/mL extract load.



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 (BLL) kinetic assays of 84869-1-RR against Human PDE 10A were performed. The affinity constant is 3.37 nM.