

Product datasheet for **CF500635**

PDE10A Mouse Monoclonal Antibody [Clone ID: OTI1B2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1B2
Applications:	IHC, WB
Recommended Dilution:	WB 1:500, IHC 1:50
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full-length protein expressed in 293T cell transfected with human PDE10A expression vector
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	88.4 kDa
Gene Name:	phosphodiesterase 10A
Database Link:	NP_006652 Entrez Gene 63885 Rat Entrez Gene 10846 Human Q9Y233



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Background:

Phosphodiesterases (PDEs) are a family of related phosphohydrolyases that selectively catalyze the hydrolysis of 3'cyclic phosphate bonds in adenosine and/or guanine 3',5' cyclic monophosphate (cAMP and/or cGMP). They regulate the cellular levels, localization and duration of action of these second messengers by controlling the rate of their degradation. There are 11 subtypes of PDEs, named PDE1-11; PDE4, 7 and 8 selectively degrade cAMP, PDE5, 6 and 9 selectively degrade cGMP and PDE1, 2, 3, 10 and 11 degrade both cyclic nucleotides. PDEs are expressed ubiquitously, with each subtype having a specific tissue distribution. These enzymes are involved in many signal transduction pathways and their functions include vascular smooth muscle proliferation and contraction, cardiac contractility, platelet aggregation, hormone secretion, immune cell activation, and they are involved in learning and memory.

Synonyms:

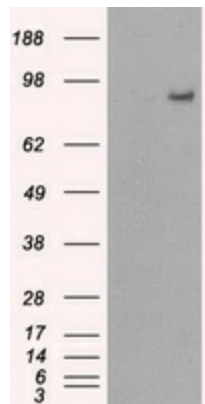
FLJ11894; FLJ25677; HSPDE10A

Protein Families:

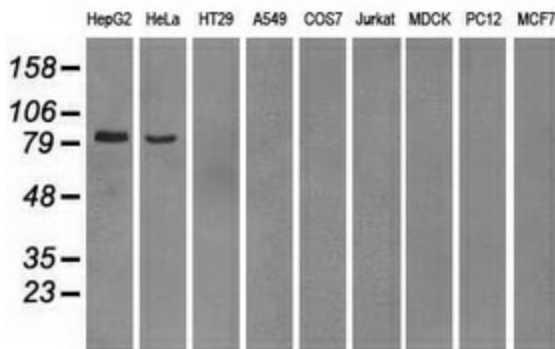
Druggable Genome

Protein Pathways:

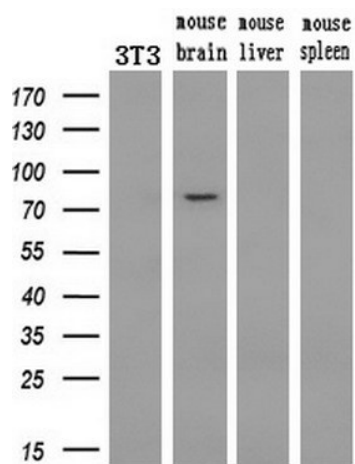
Progesterone-mediated oocyte maturation, Purine metabolism

Product images:


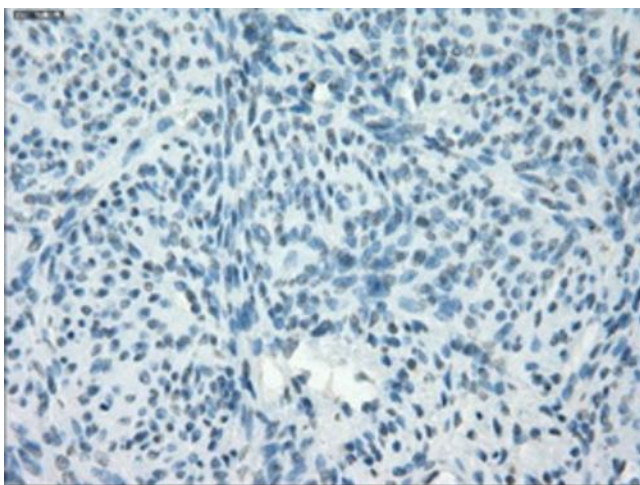
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PDE10A ([RC211181], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDE10A. Positive lysates [LY416496] (100ug) and [LC416496] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PDE10A monoclonal antibody.



Western blot analysis of extracts (10ug) from a mouse cell line and 3 different mouse tissues by using anti-PDE10A monoclonal antibody (1:200).



Immunohistochemical staining of paraffin-embedded endometrium tissue within the normal limits using anti-PDE10A mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500635], Dilution 1:50)