

Product name:	PDE10A Rabbit Polyclonal Antibody
Cat number:	ABN15883
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human PDE10A. AA range:21-70
Reactivity:	Human,Rat
Applications:	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight:	75kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase family. It plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. This protein can hydrolyze both cAMP and cGMP to the corresponding nucleoside 5' monophosphate, but has higher affinity for cAMP, and is more efficient with cAMP as substrate. Alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Dec 2011], alternative products: Isoforms differ in their N-terminal region, catalytic activity: Guanosine 3',5'-cyclic phosphate + H(2)O = guanosine 5'-phosphate., catalytic activity: Nucleoside 3',5'-cyclic phosphate + H(2)O = nucleoside 5'-phosphate., cofactor: Binds 1 magnesium ion., cofactor: Binds 1 zinc ion., domain: Composed of a C-terminal catalytic domain containing two divalent metal sites and an N-terminal regulatory domain which contains one cyclic nucleotide-binding region., domain: The tandem GAF domains bind cAMP, and regulate enzyme activity. The binding of cAMP stimulates enzyme activity., enzyme regulation: Inhibited by dipyrindamole and moderately by IBMX. cAMP acts as an allosteric activator., function: Plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. Can hydrolyze both cAMP and cGMP, but has higher affinity for cAMP and is more efficient with cAMP as substrate., pathway: Purine metabolism; cAMP degradation; AMP from cAMP: step 1/1., pathway: Purine metabolism; cGMP degradation; GMP from cGMP: step 1/1., similarity: Belongs to the cyclic nucleotide phosphodiesterase family., similarity: Contains 2 GAF domains., subcellular location: Located mostly to soluble cellular fractions., subunit: Homodimer., tissue specificity: Abundant in the putamen and caudate nucleus regions of brain and testis, moderately expressed in the thyroid gland, pituitary gland, thalamus and cerebellum.,