
Product Name: PDE10A Rabbit Polyclonal Antibody**Catalog #: APRab15883**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight	75kDa

Antigen Information

Gene Name	PDE10A
Alternative Names	PDE10A; cAMP and cAMP-inhibited cGMP 3'; 5'-cyclic phosphodiesterase 10A
Gene ID	10846.0
SwissProt ID	Q9Y233
Immunogen	The antiserum was produced against synthesized peptide derived from human PDE10A. AA range:21-70

Background

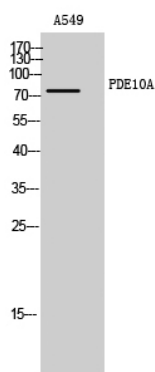
The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase family. It plays a role in signal

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 + H₂O = guanosine 5'-phosphate, catalytic activity: Nucleoside 3',5'-cyclic phosphate + H₂O = 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,

Research Area

Purine metabolism;

Image Data



Western Blot analysis of A549 cells using PDE10A Polyclonal Antibody