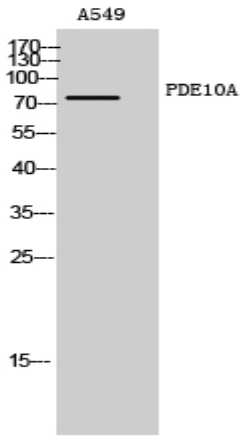
Best Tools for immunology Research

PDE10A Polyclonal Antibody

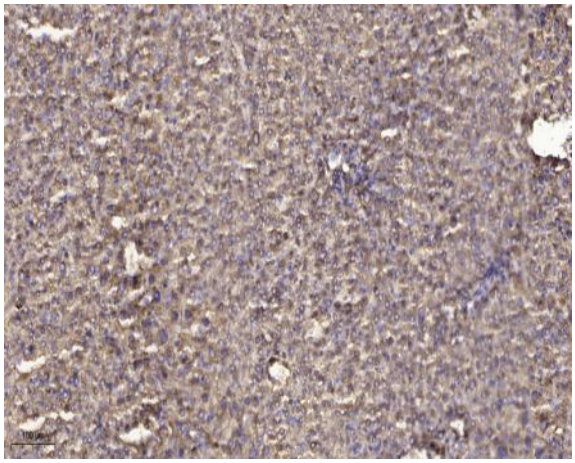
Catalog No :	YT3627
Reactivity :	Human;Rat
Applications :	WB;ELISA;IHC
Target :	PDE10A
Fields :	>>Purine metabolism;>>Metabolic pathways;>>cAMP signaling pathway;>>Morphine addiction
Gene Name :	PDE10A
Protein Name :	cAMP and cAMP-inhibited cGMP 3',5'-cyclic phosphodiesterase 10A
Human Gene Id :	10846
Human Swiss Prot No :	Q9Y233
Mouse Swiss Prot No :	Q8CA95
Rat Gene Id :	63885
Rat Swiss Prot No :	Q9QYJ6
Immunogen :	The antiserum was produced against synthesized peptide derived from human PDE10A. AA range:21-70
Specificity :	PDE10A Polyclonal Antibody detects endogenous levels of PDE10A protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	75kD
Cell Pathway :	Purine metabolism;
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],
Function :	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 dipyridamole 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 w
Subcellular Location :	Cytoplasm, cytosol .
Expression :	Abundant in the putamen and caudate nucleus regions of brain and testis, moderately expressed in the thyroid gland, pituitary gland, thalamus and cerebellum.

Products Images



Western Blot analysis of A549 cells using PDE10A Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).