Data Sheet (Cat.No.TMAB-10109)

TargetMol

Anti-PDE4A Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Rat (predicted:Human,Mouse,Pig,Cow,Horse)
Molecular Weight:	Theoretical: 98 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	Paraformaldehyde-fixed, paraffin embedded (rat stomach tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (PDE4A) Polyclonal Antibody, Unconjugated (TMAB-10109) at 1:400 overnight at 4°C, followed by a conjugated secondary for 20 minutes and DAB staining.
Application:	IHC-P,IHC-Fr,IF
Recommended	IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human PDE4A
Antigen Species:	Human
Gene ID:	5141
Uniprot ID:	P27815

Research Background

Enzymes of the cAMP-dependent phosphodiesterase type 4 (PDE4) family are important in hydrolyzing cAMP produced by G-protein coupled receptor (GPCR) stimulated adenylyl cyclases. In brain, more than 90% of cAMP formed by the stimulation of GPCRs is hydrolyzed by PDE4 enzymes. PDE4 enzymes are also important molecular targets for a variety of therapeutic agents like antidepressants, anti-asthmatics, and anti-inflammatory drugs. PDE4 family comprises 4 genes (PDE4A, B, C and D); each exhibiting multiple isozymes due to alternate splicing that leads to a larger number of distinct PDE4 variants. Members of the PDE4 family are regulated/activated by phosphorylation/dephosphorylation by cAMP-dependent protein kinase A and phosphatases. Protein-protein interactions and cellular trafficking of PDE4A enzymes play an important role in cAMP compartmentalization and cAMP-dependent signaling. In brain members of the PDE4A, B and D family are associated with GPCRs (adrenergic and dopaminergic) signaling. There are 5 isoforms.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481