

Rabbit Polyclonal Anti-PDE4D antibody

Catalog Number: PD4-401AP

General Information

Product	Pan PDE4D Antibody
Description	Phosphodiesterase 4D Antibody
Verified Applications	CM, ELISA, ICC, IF, IHC, IMM, WB
Species Cross Reactivity	Human, Mouse, Rat
Host	Rabbit
Immunogen	Synthetic peptide selective for all PDE4D variants.
Alternative Nomenclature	cAMP specific 3',5' cyclic phosphodiesterase 4D antibody, DKFZp686M11213 antibody, DPDE3 antibody, Duncce like phosphodiesterase E3 antibody, FLJ97311 antibody, PDE43 antibody, Pde4d antibody, PDE4DN2 antibody, Phosphodiesterase 4D cAMP specific (phosphodiesterase E3 duncce homolog Drosophila) antibody, STRK1 antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.57 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20 ⁰ C for long term storage.

Recommended Dilutions

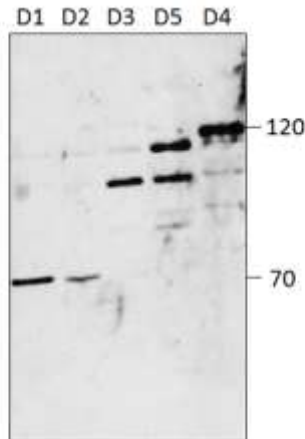
DOT Blot	1:10,000
ELISA	1:10,000
Immunocytochemistry	1:100-1:250
Immunofluorescence	1:100-1:250
Immunohistochemistry	1:100-1:250
Immunoprecipitation	1:150
Western Blot	1:500

Related Products

Catalog

FITC-Conjugated	PD4D-FITC
Antigenic Blocking Peptide	P-PD4D
Western Blot Positive Control	PC-PD4D

Application Verification:



WB of PD4-401AP antibody with various PDE4D subtype specific positive controls (PC-PD4D1, PC-PD4D2, PC-PD4D3, PC-PD4D5 and PC-PD4D4). Apparent MW for D1-D5 are 68, 70, 95, 119 and 105 kDa respectively. 1:500 antibody dilution in DiluObuffer.

Overview:

Cyclic AMP-dependent phosphodiesterase type D (PDE4D) family is comprise of 5 variants (PDE4D1, D2, D3, D4 and D5; 1, 2). One or more PDE4D subtype-variants are ubiquitously present in all mammalian cells. In CNS all five PDE4D subtype-variants are expressed in varying ratios and their activity is regulated in tandem with GPCRs stimulation. Peripheral tissues also exhibit differential expression of PDE4D variants. PDE4D1/D2 mRNA levels rise in response to an increase in cAMP (3). Short-term regulation of PDE4D variants involved PKA, MAP kinases and Erk2 phosphorylation that results in rapid change in their enzymatic activities (2, 4). Other regulatory mechanism involved protein-protein interactions with cytoskeletal scaffolding proteins (5). Anti-PDE4D antibodies are ideal tools for studying regulation, expression, phosphorylation, and protein-protein interactions of PDE4D variants employing pull-down immunoprecipitation protocol.

FabGennix provides PDE family selective, family subtype-selective and subtype-variant selective antibodies for detailed analysis of cAMP signaling pathways. The PDE4D selective antibody was generated using unique peptides common to PDE4D members. The cyclic peptide methodology was used to generate high specificity and high titer antibodies (6). Antibody PD4-4401AP label all known PDE4D variants including PDE4D1, D2, D3, D4 and D5 variants. FabGennix also carries western blot positive controls for all PDE4D variants in ready-to-use buffers for their identification and quantification on Western blots. PDE4D-selective antibody is available in affinity-purified form for confocal, Western blotting and immunocytochemical analyses. FabGennix will tag these antibodies with fluorescent probes upon request at extra charge.

References:

1. Bolger G. B., Erdogan S., Jones R. E., Loughney K., Scotland G., Hoffman R., Wilkinson I., Farrell K., Houslay M. D. *Biochem. J.* 328; 539-548, 1997
2. Alvarez R., SetteC., Yang D. Eglen R. M., Wilhelm R., Shelton E. R., Conti M. *Mol. Pharmacol.* 48; 616-622, 1995.
3. Erdogan S and Houslay M. D. *Biochem. J.* 321; 165-175, 1997.
4. Hoffmann R., Baile G. S., Houslay M. D., Kilgour E., Anderson N. G. *EMBO J.* 18; 893-903, 1999.
5. Yarwood J. S., Steele M. R., Scotland G., Houslay M. D., Bolger G. B. *J. Biol. Chem.* 274; 14909-17917, 1999.
6. Farooqui, S. M., Brock. W. J., Hamdi A., Prasad. C. *J. Neurochem.* 57; 1363-1369, 1991.

* For users who may require large amounts of the products listed above, please inquire about bulk material discounts.
This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.