

Rabbit Polyclonal Anti-Phospho-PDE11A (S162) antibody

Catalog Number: PPD11A-160AP

Lot Number:

General Information

Product	Phospho-PDE11A (S162) Antibody
Description	Phospho-Specific Cyclic Nucleotide Phosphodiesterase 11A Antibody C-epitope
Accession #	Uniprot: Q9HCR9 GenBank: CAB82573.1
Verified Applications	ELISA, IP, WB
Species Cross Reactivity	Rat
Host	Rabbit
Immunogen	Synthetic peptide taken within amino acid region 100-200 on rat PDE11A4. Peptide contains a phosphorylated serine 162 residue.
Alternative Nomenclature	5''-cyclic-AMP and -GMP phosphodiesterase 11A antibody, cAMP and cGMP cyclic nucleotide phosphodiesterase 11A antibody, Dual 3'' antibody, FLJ23693 antibody, PPNAD2 antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	0.69 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20°C for long term storage.

Recommended Dilutions

DOT Blot	1:10,000
ELISA	1:10,000
Immunohistochemistry	1:250
Immunoprecipitation	1:250
Western Blot	1:500

Related Products

Catalog

FITC-Conjugated	PPD11A.160-FITC
BIOTIN-Conjugated	PPD11A.160-BIOTIN
Phospho-PDE11A (S117)	PPD11A-140AP
Phospho-PDE11A (S117 & S124)	PPD11A-150AP
Antigenic Blocking Peptide	P-PPD11A.160
Western Blot Positive Control	PC-PPD11A

Overview:

Cyclic nucleotides are important intracellular second messengers which play pivotal role in variety of signal transduction process. The cyclic nucleotides are compartmentalized and hydrolyzed by the action of cAMP or cGMP phosphodiesterases 1-12 (PDE1-12) that hydrolyze them in to non-cyclic nucleotides. Among the cGMP-dependent PDEs, PDE5 and PDE11 exhibit similar structure and share 50% homology in their catalytic domain. PDE11A has an N-terminus GAF domain that is homologous to other signaling molecules found in PDE2, PDE5, PDE6, and PDE10, which may represent allosteric cGMP and other small signaling molecules. The PDE11A is sensitive to the non-selective PDE inhibitor IBMX as well as zaprinast and dipyridamole, inhibitors that are generally selective for cGMP-specific enzymes. PDE11A expression is diverse and is found in high levels in brain tissue, prostate, kidney, liver, pituitary and testis. At least four variants of PDE11A have been identified (PDE11A1, A2, A3 and A4) based on the three transcripts identified in various tissues ranging in size from 10.5 kb, 8.5 and 6.0 kb. Western blotting with PDE11A antibody labels at least four PDE11A variants 120 kDa, 79 kDa, 65 kDa and a 57 kDa.

Three phosphorylation sites on PDE11A have been mapped based on site directed mutagenesis and in vitro kinase assay followed by peptide mapping. These sites are S117, S124 and S162 on human PDE11A4, but the phosphorylation of S124 has not been clearly identified by in vitro kinase assays or by site directed mutagenesis. FabGennix has developed three phospho-specific antibodies against PDE11A directed towards phosphorylated S117 (PPD11A-140AP), S117 & S125 (PPD11A-150AP), and S162 (PPD11A-160AP). Antigenic blocking peptides for immunodepletion/immunocompetition assays are available. Antibodies can be conjugated to secondary enzymes or fluorophores upon request at nominal cost. For a complete listing of all FabGennix antibodies and services, including PDE family, subtype and variant specific antibodies, please visit <http://fabgennix.com>.

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