

Product datasheet

Anti-PDE4A antibody ab42094

3 References 1 Image

Overview

Product name	Anti-PDE4A antibody
Description	Rabbit polyclonal to PDE4A
Host species	Rabbit
Specificity	PDE4A5 variant specific. Does not cross-react with PDE4A8 or other PDE4A proteins including PDE4A4, PDE4A1 and PDE4Ax or with other PDE family members.
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Recombinant fragment
Immunogen	Synthetic peptide corresponding to Rat PDE4A5 (N terminal). EAW74861.1 Modified to achieve desired antigenicity and linker for covalent coupling to blue carrier protein. Database link: P54748

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at 4°C (up to 6 months). Store at -20°C.
Storage buffer	Antibody stabilization buffer, with preservatives, consisting of Hepes, NaCl, KCl, glycerol, BSA and chaotropic agents.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab42094 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/750 - 1/1000. Detects a band of approximately 108 kDa (predicted molecular weight: 108 kDa).

Target

Function

Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes.

Tissue specificity

Isoform 1 is widely expressed. Isoform 2 is abundant in liver, stomach, testis, thyroid and adrenal glands. It is also found in placenta, kidney, pancreas, ovary, uterus, skin, monocytes, mast cells, macrophages, as well as in bronchial smooth muscle. Isoform 6 is expressed at high levels in the heart and small intestine. It is also found in the brain, kidney, spleen, colon, salivary gland, ovary and peripheral blood lymphocytes. Isoform 7 is expressed predominantly in skeletal muscle and brain and at lower levels in the testis. Isoform 7 is expressed in the brain. Found in specific neuronal subpopulations in cortex, spinal cord and cerebellum (at protein level).

Pathway

Purine metabolism; 3',5'-cyclic AMP degradation; AMP from 3',5'-cyclic AMP: step 1/1.

Sequence similarities

Belongs to the cyclic nucleotide phosphodiesterase family. PDE4 subfamily.

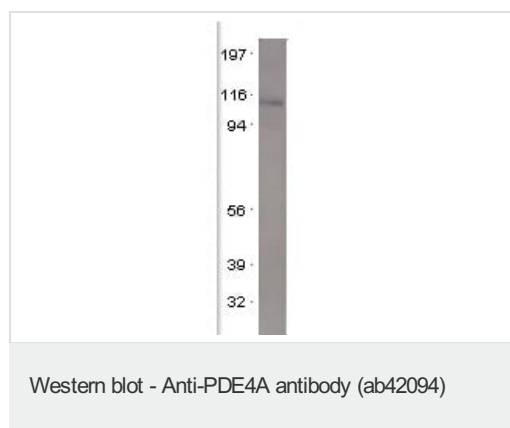
Post-translational modifications

Phosphorylated at Ser-686 and Ser-688 when expressed in *S.frugiperda* cells. Isoform 2 and isoform 7 are activated by phosphorylation at Ser-119 and Ser-123 respectively by PKA. Proteolytically cleaved by caspase-3.

Cellular localization

Cytoplasm > perinuclear region; Cytoplasm > perinuclear region. Cell projection > ruffle membrane; Cytoplasm. Membrane. Predominantly cytoplasmic and Membrane. Isoform 4 has propensity for association with membranes.

Images



Anti-PDE4A antibody (ab42094) + PDE4A5

Predicted band size: 108 kDa

Observed band size: 108 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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