abcam

Product datasheet

Anti-PDE4D (phospho S190) antibody ab59212

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Overview

Product name Anti-PDE4D (phospho S190) antibody

Description Rabbit polyclonal to PDE4D (phospho S190)

Host species Rabbit

Tested applications
Suitable for: IHC-P, WB
Species reactivity
Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Synthetic peptide corresponding to Human PDE4D aa 150-250 (phospho S190). (R-E-SP-F-L).

Database link: Q08499

Positive control IHC-P: Human colon carcinoma tissue WB: K562 cell extracts treated with H₂O₂ (100uM,

30mins).

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 -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

Without Mg+2 and Ca+2

Purity Immunogen affinity purified

Purification notes ab59212 was affinity purified from rabbit antiserum by affinity chromatography using epitope

specific phosphopeptide. The antibody against non phosphopeptide was removed by chromatography using non phosphopeptide corresponding to the phosphorylation site.

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Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab59212 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
IHC-P		1/50 - 1/100.
WB		1/500 - 1/1000. Detects a band of approximately 75 kDa (predicted molecular weight: 91 kDa).

Target

Function Hydrolyzes the second messenger cAMP, which is a key regulator of many important

physiological processes.

Tissue specificity Widespread; most abundant in skeletal muscle. Isoform 6 is detected in brain. Isoform 8 is

detected in brain, placenta, lung and kidney. Isoform 7 is detected in heart and skeletal muscle.

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

Involvement in diseaseNote=Genetic variations in PDE4D might be associated with susceptibility to stroke.

PubMed:17006457 states that association with stroke has to be considered with caution.

Sequence similaritiesBelongs to the cyclic nucleotide phosphodiesterase family. PDE4 subfamily.

Post-translational

lsoform 3 and isoform 7 are activated by phosphorylation (in vitro), but not isoform 6. Isoform N3 and isoform 12 are phosphorylated on Sor 49. Sor 51. Sor 55 and Sor 59.

modifications

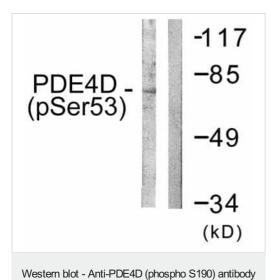
and isoform 12 are phosphorylated on Ser-49, Ser-51, Ser-55 and Ser-59.

Cellular localization Cytoplasm > cytoskeleton. Cytoplasm > cytoskeleton > centrosome.

Found in the soluble fraction, associated with membranes, and associated with the cytoskeleton

and the centrosome.

Images



(ab59212)

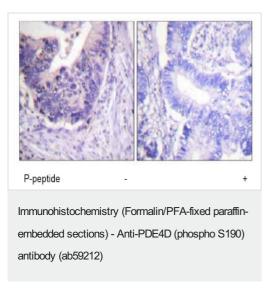
All lanes : Anti-PDE4D (phospho S190) antibody (ab59212) at 1/500 dilution

Lane 1: K562 cell extract treated with H₂O₂ (100uM, 30mins)

Lane 2: K562 cell extract treated

with H₂O₂ (100uM, 30mins) with immunising peptide

Predicted band size: 91 kDa **Observed band size:** 75 kDa



ab59212, at 1/50 dilution, staining PDE4D in paraffin embedded human colon carcinoma tissue by Immunohistochemistry in the absence or presence of the immunising peptide.

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

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