abcam

Product datasheet

Anti-CaMK2 beta gamma delta (phospho T287) antibody ab182647

8 References 8 Images

Overview

Product name Anti-CaMK2 beta gamma delta (phospho T287) antibody

Description Rabbit polyclonal to CaMK2 beta gamma delta (phospho T287)

Host species Rabbit

Tested applications

Suitable for: IHC-P, ICC/IF, WB

Species reactivity

Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide corresponding to Human CaMK2 beta gamma delta (phospho T287)

conjugated to Keyhole Limpet Haemocyanin (KLH). Peptide sequence around phosphorylation site of Threonine 287 (Q-E-T(p)-V-E) derived from Human CaMK2 beta gamma delta. Swiss-

Prot#: Q13554/Q13555/Q13557. Database link: **NP 001211.3**

Positive control WB: Rat brain lysate, human 22RV1 cells Immunohistochemistry: Human-liver-cancer tissue, Rat

testis tissue, mouse testis tissue Immunocytochemistry: Human lung tissue, rat lung tissue

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.4

Preservative: 0.02% Sodium azide

Constituents: 49% PBS, 0.88% Sodium chloride, 50% Glycerol

PBS (without Mg2⁺and Ca²⁺)

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Purity Immunogen affinity purified

Purification notes ab182647 was purified by affinity-chromatography using epitope-specific phosphopeptide. Non-

phospho specific antibodies were removed by chromatography using non-phosphopeptide.

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab182647 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		1/200.
ICC/IF		1/200.
WB		1/500. Predicted molecular weight: 50 kDa.

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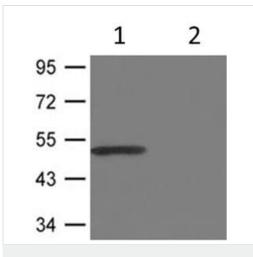
Relevance

The product of this gene belongs to the serine/threonine protein kinase family and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells, the enzyme is composed of four different chains: alpha, beta, gamma, and delta. It is possible that distinct isoforms of this chain have different cellular localizations and interact differently with calmodulin. Eight transcript variants encoding eight distinct isoforms have been identified for this gene.

Cellular localization

Cytoplasmic and Nuclear

Images



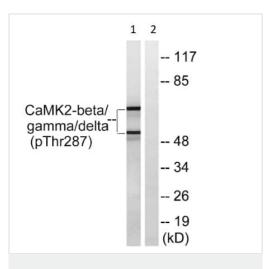
Western blot - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

All lanes : Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647) at 1/500 dilution

Lane 1: Rat brain lysate.

Lane 2: Rat brain lysate with antigen-specific peptide

Predicted band size: 50 kDa



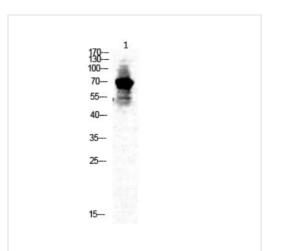
Western blot - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

All lanes : Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

Lane 1: Rat Brain

Lane 2: Rat brain blocked with phospho peptide

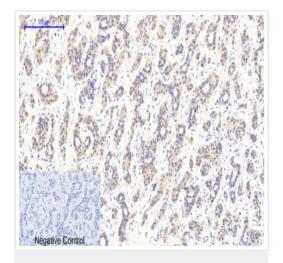
Predicted band size: 50 kDa



Western blot - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647) at 1/500 dilution + Human 22RV1 cells

Predicted band size: 50 kDa



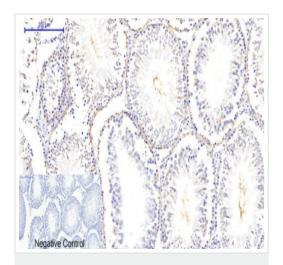
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue labelling CaMK2 beta gamma delta (phospho T287) with ab182647 at 1/200 and incubated overnight at 4°C followed by a secondary antibody diluted at 1/200, incubated at RT for 30 minutes.

Negative control: no staining on human live cancer tissue.

Negative control: Secondary antibody only.

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0) for 20 minutes.

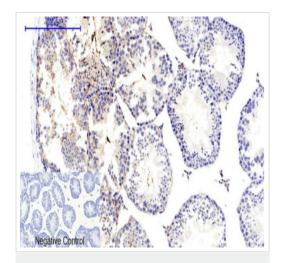


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labelling CaMK2 beta gamma delta (phospho T287) with ab182647 at 1/200 and incubated overnight at 4°C followed by a secondary antibody diluted at 1/200, incubated at RT for 30 minutes. Negative control: no staining on Rat-testis tissue.

Negative control: Secondary antibody only.

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0) for 20 minutes.

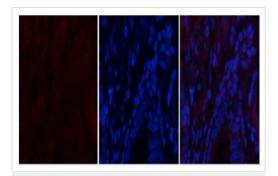


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labelling CaMK2 beta gamma delta (phospho T287) with ab182647 at 1/200 and incubated overnight at 4°C followed by a secondary antibody diluted at 1/200, incubated at RT for 30 minutes. Negative control: no staining on Rat-testis tissue.

Negative control: Secondary antibody only.

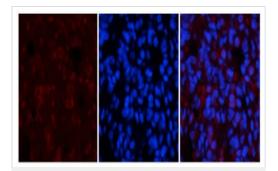
Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0) for 20 minutes.



Immunocytochemistry/ Immunofluorescence - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

Immunofluorescent analysis of human lung tissue labelling CaMK2 beta gamma delta (phospho T287) with ab182647 at 1/200 dilution, followed by Cy3 labelled secondary antibody 1/300. The Nuclear counterstain was DAPI (Blue).

Left: ab182647, Middle: DAPI, Right: Merged



Immunocytochemistry/ Immunofluorescence - Anti-CaMK2 beta gamma delta (phospho T287) antibody (ab182647)

Immunofluorescent analysis of rat lung tissue labelling CaMK2 beta gamma delta (phospho T287) with ab182647 at 1/200 dilution, followed by Cy3 labelled secondary antibody 1/300. The Nuclear counterstain was DAPI (Blue). **Left**: ab182647, **Middle**: DAPI, **Right**: Merged

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