



Product datasheet

Anti-CaMKII (phospho T286) antibody [22B1] ab171095

★★★★★ [2 Abreviews](#) [24 References](#) [5 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-CaMKII (phospho T286) antibody [22B1] |
| Description | Mouse monoclonal [22B1] to CaMKII (phospho T286) |
| Host species | Mouse |
| Specificity | ab171095 detects the phosphorylated alpha subunit CaMKII only. It does not detect the non-phosphorylated alpha subunit CaMKII or the ~60 kDa beta subunit in either phosphorylation state. |
| Tested applications | Suitable for: WB, ICC/IF |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide corresponding to Rat CaMKII aa 281-294 (phospho T286). Sequence: HRQETVDCLKKFN Database link: P11275 <div>  Run BLAST with  Run BLAST with </div> |
| Positive control | Neuro-2a, C6, HeLa or U251 cells, Rat brain lysate. |
| General notes | <p>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.</p> <p>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</p> |

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 | Preservative: 0.05% Sodium azide Constituent: 99% PBS |
| Purity | Protein G purified |
| Clonality | Monoclonal |

Clone number 22B1

Isotype IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab171095 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) | 1/2000. Predicted molecular weight: 54 kDa. |
| ICC/IF | | 1/100. |

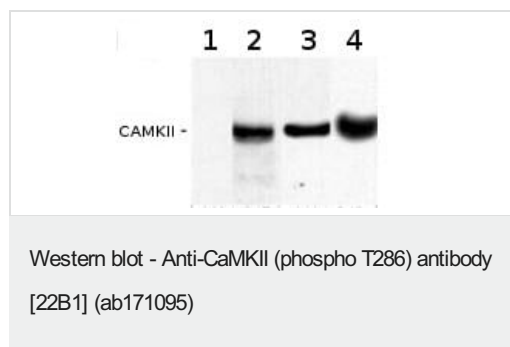
Target

Function CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. Member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity.

Sequence similarities Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.

Cellular localization Cell junction > synapse > presynaptic cell membrane. Cell junction > synapse. Postsynaptic lipid rafts.

Images



Lanes 1-2 : Anti-CaMKII (phospho T286) antibody [22B1] (ab171095) at 1/2000 dilution

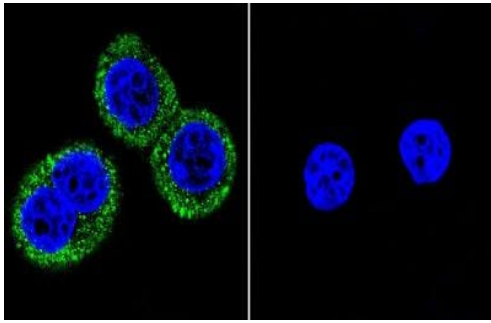
Lanes 3-4 : A non phosphorylated CaMKII antibody at 1/2000 dilution

Lane 1 : Unphosphorylated rat brain homogenate

Lanes 2 & 4 : Phosphorylated Rat brain homogenate

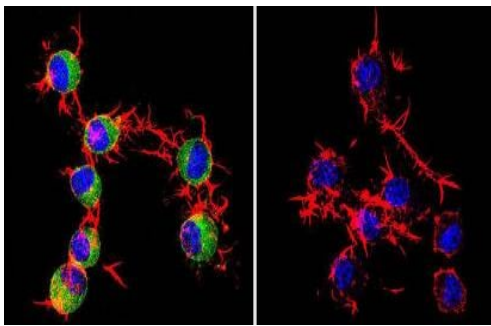
Lane 3 : Unphosphorylated Rat brain homogenate

Predicted band size: 54 kDa



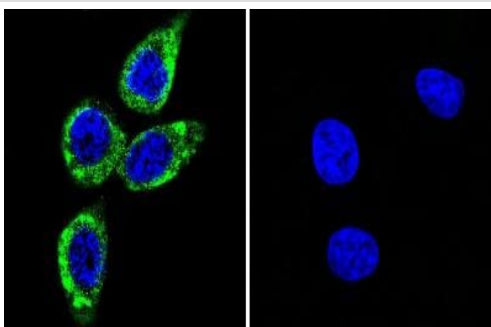
Immunofluorescence analysis of U251 (human) cells labeling phosphorylated CaMKII (green) with ab171095 at a 1/100 dilution. Nuclei are stained (blue).

Immunocytochemistry/ Immunofluorescence - Anti-CaMKII (phospho T286) antibody [22B1] (ab171095)



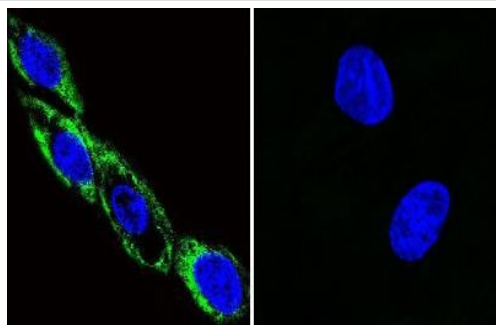
Immunofluorescence analysis of Neuro-2 (mouse) cells (left image) or cells stimulated with Lambda-phosphatase (right image) labeling phosphorylated CaMKII (green) with ab171095 at a 1/50 dilution. F-actin (red) and nuclei (blue).

Immunocytochemistry/ Immunofluorescence - Anti-CaMKII (phospho T286) antibody [22B1] (ab171095)



Immunofluorescence analysis of HeLa cells labeling phosphorylated CaMKII (green) with ab171095 at a 1/50 dilution. Nuclei are stained (blue).

Immunocytochemistry/ Immunofluorescence - Anti-CaMKII (phospho T286) antibody [22B1] (ab171095)



Immunofluorescence analysis of C6 cells labeling phosphorylated CaMKII (green) with ab171095 at a 1/100 dilution. Nuclei are stained (blue).

Immunocytochemistry/ Immunofluorescence - Anti-CaMKII (phospho T286) antibody [22B1] (ab171095)

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