

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Rat                                                                                                                                                                                                                                                                   |
| <b>Specificity</b>        | Detects endogenous human and rat CaMKKα in Western blots. In Western blots, this antibody does not cross-react with recombinant human CaMKKβ.                                                                                                                               |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human CaMKKα<br>Met1-Ser132<br>Accession # Q8N5S9                                                                                                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

The calcium/calmodulin (CaM) kinase signaling cascade includes the upstream kinases CaM kinase kinase α (CaMKKα; also known as CaMKK1) and CaMKKβ (CaMKK2), and their substrates, the output kinases CaMKI and CaMKIV. Largely by activation of the transcription factor CREB, the CaM kinase cascade is implicated in neuronal development and long-term memory formation. In addition, CaMKKα is known to modulate skeletal muscle glucose uptake, and is upregulated during retinoic acid-induced neutrophil maturation.

## PRODUCT SPECIFIC NOTICES

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