

## Recombinant Mouse CAMK4/CaMKIV Protein (His & GST Tag)

**Catalog Number:** PKSM040460

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

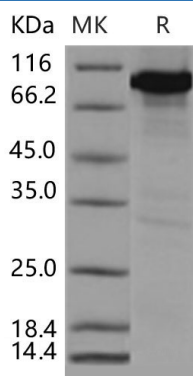
### Description

<b>Species</b>	Mouse
<b>Source</b>	Baculovirus-Insect Cells-derived Mouse CAMK4/CaMKIV protein Met1-Tyr469, with an N-terminal His & GST
<b>Calculated MW</b>	80.4 kDa
<b>Observed MW</b>	85 kDa
<b>Accession</b>	P08414
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 94 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 94 % as determined by reducing SDS-PAGE.

### Background

Ca<sup>2+</sup>/calmodulin-dependent protein kinase 4 (CAMKIV) belongs to the serine/threonine protein kinase family, and to the Ca<sup>2+</sup>/calmodulin-dependent protein kinase subfamily which is widely recognized as an essential enzyme implicated in the phosphoinositide amplification cascade. Ca<sup>2+</sup>/calmodulin dependent protein kinase (CAMK) can be activated by the intracellular increased Ca<sup>2+</sup> and then apt to combine with the target protein. Ca<sup>2+</sup>/calmodulin-dependent protein kinase 4 (CAMKIV) is a multifunctional CaM-dependent kinase protein with limited tissue distribution, that has been implicated in transcriptional regulation in lymphocytes, neurons and male germ cells. All of the is forms of this family, including myosin light chain kinase, phosphorylase kinase, CaMKI, CaMKIII and CaMKIV have EF-hand structure.

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