



Recombinant Protein Technical Manual

Recombinant Mouse CAMK4/CaMKIV Protein

RPES4153

Product Data:

Product SKU: RPES4153

Size: 20µg

Species: Mouse

Expression host: Baculovirus-Insect Cells

Uniprot: P08414

Protein Information:

Molecular Mass: 52.7 kDa

AP Molecular Mass: 55 kDa

Tag:

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice or dry ice.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: A430110E23Rik;AI666733;CaMKIV;CaMKIV/Gr;D18Bwg0362e

Immunogen Information:

Sequence: Met1-Tyr469

Background:

Ca²⁺/ calmodulin-dependent protein kinase 4 (CAMK^{IV}) belongs to the serine/threonine protein kinase family, and to the Ca²⁺/calmodulin-dependent protein kinase subfamily which is widely recognized as an essential enzyme implicated in the phosphoinositide amplification cascade. Ca²⁺/calmodulin dependent protein kinase (CAMK) can be activated by the intracellular increased Ca²⁺ and then apt to combine with the target protein. Ca²⁺/ calmodulin-dependent protein kinase 4 (CAMK^{IV}) 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 isoforms of this family, including myosin light chain kinase, phosphorylase kinase, CaMK1, CaMK^{III} and CaMK^{IV} have EF-hand structure.