



Recombinant Protein Technical Manual
Recombinant Human CAMK4/CaMKIV Protein (GST
Tag)
RPES3482

Product Data:

Product SKU: RPES3482

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_001735.1

Protein Information:

Molecular Mass: 79 kDa

AP Molecular Mass: 100 kDa

Tag: N-GST

Bio-activity:

Purity: > 82 % as determined by reducing SDS-PAGE.

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

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, 0.5mM PMSF, pH 8.0

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

Application:

Synonyms: caMK;CaMK-GR;CaMKIV;IV

Immunogen Information:

Sequence: Met 1-Tyr 473

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.