Recombinant Human CAMK4/CaMKIV Protein (GST Tag) 🤷

Catalog Number: PKSH031495



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

Description			
Synonyms	caMK;CaMK-GR;CaMKIV;IV		
Species	Human		
Expression Host	Baculovirus-Insect Cells		
Sequence	Met 1-Tyr 473		
Accession	NP_001735.1		
Calculated Molecular Weight	79.0 kDa		
Observed molecular weight	100 kDa		
Tag	N-GST		
Properties			
Purity	> 82 % as determined by reducing SDS-PAGE.		
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.		
Storage	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.		
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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.		
Reconstitution	Please refer to the printed manual for detailed information.		
Data			

KDa	MK	R	
116 66.2	-	-	
45.0 35.0	-		
25.0	-		
18.4 14.4	=		

> 82 % as determined by reducing SDS-PAGE.

## Background

Ca2+/ calmodulin-dependent protein kinase 4 (CAMKIV) 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 phophoinositide amplification cascade. Ca2+/calmodulin dependent protein kinase (CAMK) can be activated by the introcellular increased Ca2+ and then apt to combine with the target protein. Ca2+/ 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 isforms of this family, including myosin light chain kinase, phosphorylase kinase, CaMK1, CaMKIII and CaMKIV have EF-hand structure.

## For Research Use Only

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