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Recombinant Human CaMKI alpha/CAMK1 Kinase

Catalog No.: RP03422LQ Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	8536	Q14012

Tags
N-His-GST

Synonyms
CAMK1; CaMK1α; CAMKI; CaM kinase I; CaM-KI; CaM kinase I alpha; CaMKI-alpha; Calcium/calmodulin-dependent protein kinase type 1

Product Information

Source	Purification
Baculovirus-Insect Cells	≥ 85% as determined by SDS-PAGE;≥ 85% as determined by HPLC.

Calculated MW	Observed MW
41.5 kDa	30-40 kDa

Endotoxin
< 1 EU/μg of the protein by LAL method.

Formulation
Supplied as a 0.22 μm filtered solution in 50 mM Tris-HCl, 200 mM NaCl, 1 mM DTT, 5% glycerol. (pH 7.5). Contact us for customized product form or formulation.

Reconstitution
Please use running water to thaw it quickly.

Contact

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Background

Calcium/calmodulin-dependent protein kinase type 1 is an enzyme that in humans is encoded by the CAMK1 gene. Calcium/calmodulin-dependent protein kinase I is expressed in many tissues and is a component of a calmodulin-dependent protein kinase cascade. Calcium/calmodulin directly activates calcium/calmodulin-dependent protein kinase I by binding to the enzyme and indirectly promotes the phosphorylation and synergistic activation of the enzyme by calcium/calmodulin-dependent protein kinase I kinase.

Basic Information

Description
Recombinant Human CaMKI alpha/CAMK1 Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Leu370) of Human CAMK1 (Accession #Q14012) fused with a N-His-GST tag.

Bio-Activity
The activity of CaMK1α is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

Storage
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.
Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.
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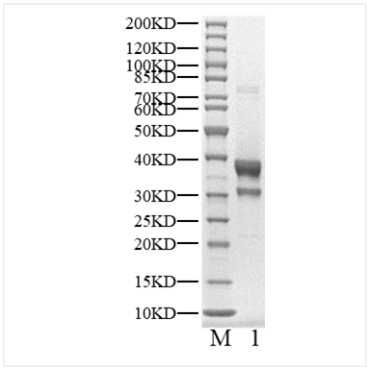
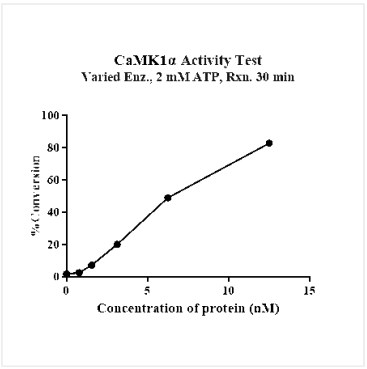
Validation Data



Recombinant Human CaMKI alpha/CAMK1 Kinase was resolved with SDS-PAGE under reducing (Lane 1) conditions.



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