Human CAMKV Protein (His & GST Tag)

Catalog Number: **12243-H20B**

General Information

Gene Name Synonym:

1G5; VACAMKL

Protein Construction:

A DNA sequence encoding the human CAMKV (NP_076951.2) (Met 1-Ser 501) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 80 % as determined by SDS-PAGE

Bio Activity:

No Kinase Activity

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant human CAMKV/GST chimera consists of 738 amino acids and has a calculated molecular mass of 82.2 kDa. It migrates as an approximately 80 kDa band in SDS-PAGE under reducing conditions.

Formulation:

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

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

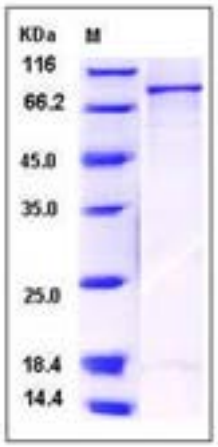
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CaM kinase-like vesicle-associated protein, also known as CAMKV, is a peripheral membrane protein and Cytoplasmic vesicle membrane protein which belongs to theprotein kinase superfamily and CAMK Ser/Thr protein kinase family. CAMKV contains oneprotein kinase domain. It is predominantly observed in association with the plasma membrane of soma and in neurites, both axons and dendrites. CAMKV may be associated with vesicular structures. It does not appear to have detectable kinase activity. Protein kinases are a group of enzymes that move a phosphate group onto proteins, in a process called phosphorylation. Protein kinases function as an on/off switch for many cellular processes, including metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. They also function in embryonic development, physiological responses, and in the nervous and immune system. Abnormal phosphorylation causes many human diseases, including cancer, and drugs that affect phosphorylation can treat those diseases. The protein kinase domain is a structurally conserved protein domain containing the catalytic function of protein kinases. Protein kinases play a role in a mulititude of cellular processes, including division, proliferation, apoptosis, and differentiation. Phosphorylation usually results in a functional change of the target protein by changing enzyme activity, cellular location, or association with other proteins.

References

1.Hunter T, et al.,1988, Science. 241 (4861): 42-51. 2.Wiemann S., et al., 2001, Genome Res. 11:422-435. 3.G. Manning, et al., 2002, Science 6. 298:1912-1934.