



Recombinant Protein Technical Manual

Recombinant Human CAMKV Protein (His & GST Tag)

RPES3077

Product Data:

Product SKU: RPES3077

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_076951.2

Protein Information:

Molecular Mass: 82.2 kDa

AP Molecular Mass: 80 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 80 % 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 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol

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

Application:

Synonyms: 1G5;VACAMKL

Immunogen Information:

Sequence: Met 1-Ser 501

Background:

CaM kinase-like vesicle-associated protein, also known as CAMKV, is a peripheral membrane protein and Cytoplasmic vesicle membrane protein which belongs to the protein kinase superfamily and CAMK Ser/Thr protein kinase family. CAMKV contains one protein 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 multitude 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.