



Recombinant Protein Technical Manual
Recombinant Human CAMK1/CaMKI-alpha Protein
(His Tag)
RPES4007

Product Data:

Product SKU: RPES4007

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q14012

Protein Information:

Molecular Mass: 42.3 kDa

AP Molecular Mass: 42 kDa

Tag: C-His

Bio-activity:

Purity: > 90% as determined by reducing SDS-PAGE.

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

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

Application:

Synonyms: Calcium/Calmodulin-Dependent Protein Kinase Type 1; CaM Kinase I; CaM-KI; CaM Kinase I Alpha; CaMKI-Alpha; CAMK1

Immunogen Information:

Sequence: Met1-Leu370

Background:

Calcium/Calmodulin-Dependent Protein Kinase Type 1 (CAMK1) belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family, and CaMK subfamily. CAMK1 contains one protein kinase domain and widely expressed. CAMK1 is phosphorylated by CaMKK1 and CaMKK2 on Thr77. CAMK1 regulates transcription activators activity, cell cycle, hormone production, cell differentiation, actin filament organization, and neurite outgrowth. CAMK1 plays a role in K⁺ and ANG2-mediated regulation of the aldosterone synthase (CYP11B2) to produce aldosterone in the adrenal cortex.