# Recombinant Human CAMK2A 293 Cell Lysate

**Cat. No.** CAMK2A-7881HCL **Lot. No.** (See product label)

## SPECIFICATION

| | |
|---|---|
| **Species** | Human |
| **Source** | HEK293 |
| **Description** | Antigen standard for calcium/calmodulin-dependent protein kinase II alpha (CAMK2A), transcript variant 2 is a lysate prepared from HEK293T cells transiently transfected with a TrueORF gene-carrying pCMV plasmid and then lysed in RIPA Buffer. Protein concentration was determined using a colorimetric assay. The antigen control carries a C-terminal Myc/DDK tag for detection. |
| **Components** | This product includes 3 vials: 1 vial of gene-specific cell lysate, 1 vial of control vector cell lysate, and 1 vial of loading buffer. Each lysate vial contains 0.1 mg lysate in 0.1 ml (1 mg/ml) of RIPA Buffer (50 mM Tris-HCl pH7.5, 250 mM NaCl, 5 mM EDTA, 50 mM NaF, 1% NP40). The loading buffer vial contains 0.5 ml 2X SDS Loading Buffer (125 mM Tris-Cl, pH6.8, 10% glycerol, 4% SDS, 0.002% Bromophenol blue, 5% beta-mercaptoethanol). |
| **Size** | 0.1 mg |
| **Storage Instruction** | Store at -80°C. Minimize freeze-thaw cycles. After addition of 2X SDS Loading Buffer, the lysates can be stored at -20°C. Product is guaranteed 6 months from the date of shipment. |
| **Applications** | ELISA, WB, IP. WB: Mix equal volume of lysates with 2X SDS Loading Buffer. Boil the mixture for 10 min before loading (for membrane protein lysates, incubate the |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|---|---|
| | mixture at room temperature for 30 min). Load 5 ug lysate per lane. |

## GENE INFORMATION

| | |
|---|---|
| **Gene Name** | CAMK2A calcium/calmodulin-dependent protein kinase II alpha [ Homo sapiens ] |
| **Official Symbol** | CAMK2A |
| **Synonyms** | CAMK2A; calcium/calmodulin-dependent protein kinase II alpha; calcium/calmodulin dependent protein kinase (CaM kinase) II alpha , CAMKA; calcium/calmodulin-dependent protein kinase type II subunit alpha; calcium/calmodulin dependent protein kinase II alpha B subunit; calcium/calmodulin dependent protein kinase type II alpha chain; CaM kinase II alpha subunit; CaM kinase II alpha chain; CaMK II alpha subunit; CaMKIINalpha; KIAA0968; CaMK-II alpha subunit; caMK-II subunit alpha; CaM-kinase II alpha chain; caM kinase II subunit alpha; calcium/calmodulin-dependent protein kinase II alpha-B subunit; calcium/calmodulin-dependent protein kinase type II alpha chain; calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha; CAMKA; |
| **Gene ID** | 815 |
| **mRNA Refseq** | NM_171825 |
| **Protein Refseq** | NP_741960 |
| **MIM** | 114078 |
| **UniProt ID** | Q9UQM7 |
| **Chromosome Location** | 5 |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

| | |
|---|---|
| **Pathway** | Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Amphetamine addiction, organism-specific biosystem; Amphetamine addiction, conserved biosystem; CREB phosphorylation through the activation of CaMKII, organism-specific biosystem; CREB phosphorylation through the activation of Ras, organism-specific biosystem; Calcium Regulation in the Cardiac Cell, organism-specific biosystem; Calcium signaling pathway, organism-specific biosystem; |
| **Function** | ATP binding; calmodulin binding; calmodulin-dependent protein kinase activity; kinase activity; nucleotide binding; protein binding; |

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA