Recombinant Human CAMK2A 293 Cell Lysate

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

SPECIFICATION

Product Overview	
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.

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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 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

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Chromosome Location	5
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;

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