

## Recombinant Human CAMK2B, GST-tagged

Cat. No. CAMK2B-10682H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human CAMK2B protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.

**Species** Human

**Source** E.coli

**ProteinLength** N-term-315a.a.

**Description** The product of this gene belongs to the serine/threonine protein kinase family and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells, the enzyme is composed of four different chains: alpha, beta, gamma, and delta. The product of this gene is a beta chain. It is possible that distinct isoforms of this chain have different cellular localizations and interact differently with calmodulin. Eight transcript variants encoding eight distinct isoforms have been identified for this gene.

**Storage** The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.

**Storage Buffer** 1M PBS (58mM Na<sub>2</sub>HPO<sub>4</sub>, 17mM NaH<sub>2</sub>PO<sub>4</sub>, 68mM NaCl, pH8. ) added with 100mM GSH and 1% Triton X-100, 15% glycerol.

### GENE INFORMATION

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<b>Gene Name</b>	CAMK2B calcium/calmodulin-dependent protein kinase II beta [ Homo sapiens ]
<b>Official Symbol</b>	CAMK2B
<b>Synonyms</b>	CAMK2B; calcium/calmodulin-dependent protein kinase II beta; calcium/calmodulin dependent protein kinase (CaM kinase) II beta , CAMKB; calcium/calmodulin-dependent protein kinase type II subunit beta; calcium/calmodulin dependent protein kinase type II beta chain; CaM kinase II beta subunit; CaM kinase II beta chain; CAM2; CAMK2; proline rich calmodulin dependent protein kinase; caMK-II subunit beta; CaM-kinase II beta chain; proline rich calmodulin-dependent protein kinase; CAMKB; MGC29528;
<b>Gene ID</b>	816
<b>mRNA Refseq</b>	NM_001220
<b>Protein Refseq</b>	NP_001211
<b>MIM</b>	607707
<b>UniProt ID</b>	Q13554
<b>Chromosome Location</b>	7p14.3-p14.1
<b>Pathway</b>	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

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biosystem;

**Function**

ATP binding; actin binding; calmodulin binding; calmodulin-dependent protein kinase activity; nucleotide binding;

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