

Immunotag™ Phospho-CaMK2 beta/ gamma/ delta (Thr287) Antibody

Antibody Specification	
Catalog No.	ITA1203
Product Description	Immunotag™ Phospho-CaMK2 beta/ gamma/ delta (Thr287) Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Phospho-CaMK2 beta/ gamma/ delta (Thr287)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC,ELISA
Recommended Dilution	WB 1:500-1:2000 IHC 1:50-1:200
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human CaMK2- beta/ gamma/ delta around the phosphorylation site of Threonine 287
Specificity	Phospho-CaMK2- beta/ gamma/ delta (Thr287) Antibody detects endogenous levels of CaMK2- beta/ gamma/ delta only when phosphorylated at Threonine 287
Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	CAMK2B
Accession No.	Q13554/Q13555/Q13557

## Antibody Specification

Alternate Names	Calcium/calmodulin-dependent protein kinase type II subunit alpha; Calcium/calmodulin-dependent protein kinase type II subunit delta; CaM kinase II subunit alpha; CaM kinase II subunit delta; CAM2; CaMK-II subunit alpha; CaMK-II subunit delta; CAMK2A; CAMK2B; CAMKA; CAMKB; CAMKD; CaMKII alpha; KIAA0968; CaM kinase II; CaM kinase II gamma chain; CaM kinase II subunit gamma; CAMK; CAMK II; CaMK II subunit gamma; CAMK2G; CAMKG; CAMKII; Calcium / calmodulin dependent protein kinase 2 delta; Calcium / calmodulin dependent protein kinase II delta; calcium/calmodulin-dependent protein kinase (CaM kinase) II delta; calcium/calmodulin-dependent protein kinase type II delta chain; Calcium/calmodulin-dependent protein kinase type II subunit delta; CAM kinase 2 delta; CAM kinase II delta; CaM kinase II delta subunit; CaM kinase II subunit delta; CaM-kinase II delta chain; CAMK 2d; CaMK-II delta subunit; CaMK-II subunit delta; CAMK2D; CAMKD; CAMKI; KCC2D_HUMAN; RATCAMKI;
Description	Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca <sup>2+</sup> /calmodulin-binding and autophosphorylation, and is involved in dendritic spine and synapse formation, neuronal plasticity and regulation of sarcoplasmic reticulum Ca <sup>2+</sup> transport in skeletal muscle. In neurons, plays an essential structural role in the reorganization of the actin cytoskeleton during plasticity by binding and bundling actin filaments in a kinase-independent manner. This structural function is required for correct targeting of CaMK2A, which acts downstream of NMDAR to promote dendritic spine and synapse formation and maintain synaptic plasticity which enables long-term potentiation (LTP) and hippocampus-dependent learning. In developing hippocampal neurons, promotes arborization of the dendritic tree and in mature neurons, promotes dendritic remodeling. Participates in the modulation of skeletal muscle function in response to exercise. In slow-twitch muscles, is involved in regulation of sarcoplasmic reticulum (SR) Ca <sup>2+</sup> transport and in fast-twitch muscle participates in the control of Ca <sup>2+</sup> release from the SR through phosphorylation of triadin, a ryanodine receptor-coupling factor, and phospholamban (PLN/PLB), an endogenous inhibitor of SERCA2A/ATP2A2.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	50+65kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.