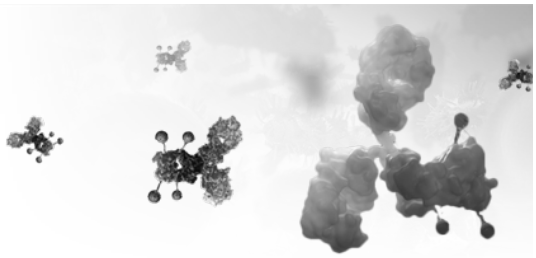

Mouse anti-Rat Cacnb4 monoclonal antibody, clone T20-8 (CABT-B9885)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Detects ~50KDa. No cross-reactivity against rat Cab Beta1b, Cav beta2a, and Cav betas3 in transfected cells.
Immunogen	A synthetic peptide corresponding to amino acids 458-474 of rat Cacnb4.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat
Clone	T20-8
Conjugate	Unconjugated
Applications	WB, IHC, IF, IP
Format	Liquid
Buffer	In PBS, pH 7.4 (50% glycerol, 0.09% sodium azide)
Storage	Store at -20°C.Aliquot to avoid repeated freezing and thawing.

BACKGROUND

Introduction	This gene encodes a member of the beta subunit family of voltage-dependent calcium channel complex proteins. Calcium channels mediate the influx of calcium ions into the cell upon membrane polarization and consist of a complex of alpha-1, alpha-2/delta, beta, and gamma subunits in a 1:1:1:1 ratio. Various versions of each of these subunits exist, either expressed

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

	from similar genes or the result of alternative splicing. The protein encoded by this locus plays an important role in calcium channel function by modulating G protein inhibition, increasing peak calcium current, controlling the alpha-1 subunit membrane targeting and shifting the voltage dependence of activation and inactivation. Certain mutations in this gene have been associated with idiopathic generalized epilepsy (IGE) and juvenile myoclonic epilepsy (JME). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]
Keywords	CACNB4; calcium channel, voltage-dependent, beta 4 subunit; EA5; EJM; CAB4; EIG9; EJM4; EJM6; CACNLB4; voltage-dependent L-type calcium channel subunit beta-4; calcium channel voltage-dependent subunit beta 4; dihydropyridine-sensitive L-type, calcium channel beta-4 subunit;

GENE INFORMATION

Entrez Gene ID	58942
UniProt ID	D4A055
Pathway	Arrhythmogenic right ventricular cardiomyopathy (ARVC);Axon guidance;Cardiac muscle contraction;Depolarization of the Presynaptic Terminal Triggers the Opening of Calcium Channels;Developmental Biology;
Function	high voltage-gated calcium channel activity;contributes_to high voltage-gated calcium channel activity;voltage-gated calcium channel activity;contributes_to voltage-gated calcium channel activity;

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221