Anti-CACNA1A Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R015993

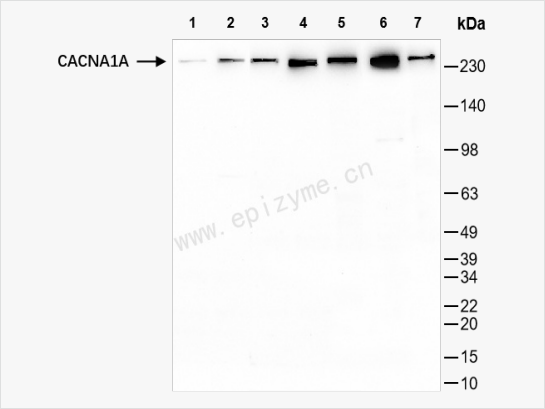
Product Information

Application	WB, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	13I93I11
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human CACNA1A
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-CACNA1A Rabbit mAb [13I93I11] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	APCA; BI; Brain calcium channel 1; Brain calcium channel I; Cach4; Cacn3; Cacna1a; Cacnl1a4; Calcium channel alpha 1A subunit; Calcium channel L type alpha 1 polypeptide; Calcium channel L type alpha-1 polypeptide isoform 4; Calcium channel voltage dependent, P/Q type alpha 1A subunit; CAV2.1; EA2; FHM; HPCA; MHP; MHP1; RAT brain class A; RBA-I; SCA6; Voltage-dependent P/Q-type calcium channel alpha-1A subunit; Voltage-gated calcium channel alpha subunit Cav2.1; CAC1A_HUMAN.
Calculated MW	Calculated MW: 283 kDa; Observed MW: 283 kDa
Uniprot ID	O00555, P97445, P54282
Gene ID	773, 12286, 25398
Background	Voltage-dependent calcium channels mediate the entry of calcium ions into excitable cells, and are also involved in a variety of calcium-dependent processes, including muscle contraction, hormone or neurotransmitter release, and gene expression. Calcium channels are multisubunit complexes composed of alpha-1, beta, alpha-2/delta, and gamma subunits. The channel activity is directed by the pore-forming alpha-1 subunit, whereas, the others act as auxiliary subunits regulating this activity. The distinctive properties of the calcium channel types are related primarily to the expression of a variety of alpha-1 isoforms, alpha-1A, B, C, D, E, and S. This gene encodes the alpha-1A subunit, which is predominantly expressed in neuronal tissue. Mutations in this gene are associated with 2 neurologic disorders, familial hemiplegic migraine and episodic ataxia 2. This gene also exhibits polymorphic variation due to (CAG)n-repeats. Multiple transcript variants encoding different isoforms have been found for this gene. In one set of transcript variants, the (CAG)n-repeats occur in the 3' UTR, and are not associated with any disease. But in another set of variants, an insertion extends the coding region to include the (CAG)n-repeats which encode a

Validation Images



Western Blot - Anti-CACNA1A Rabbit mAb [13I93I11]
All lanes: R015993 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates
Lane 4: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 5: Mouse brain whole tissue lysates
Lane 6: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates
Lane 7: Rat brain whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 283 kDa
Observed band size: 283 kDa
Developed using the ECL technique (Cat. No. SQ201).