

## Anti-CACNA2D2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

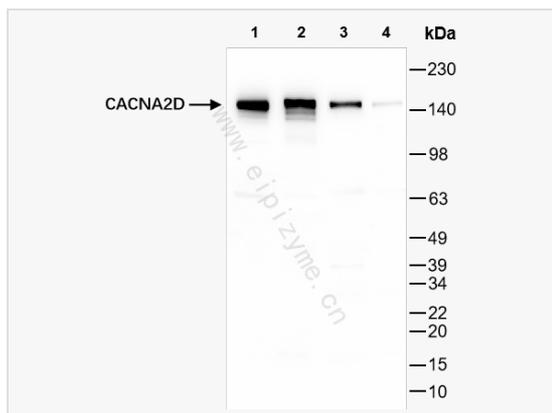
Catalog # R016136

### Product Information

Application	WB, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	70B75A65
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human CACNA2D
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-CACNA2D2 Rabbit mAb [70B75A65] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	Voltage-dependent calcium channel subunit alpha-2/delta-2; Voltage-gated calcium channel subunit alpha-2/delta-2; Voltage-dependent calcium channel subunit alpha-2-2; Voltage-dependent calcium channel subunit delta-2; CACNA2D2; KIAA0558.
Calculated MW	Calculated MW: 130 kDa; Observed MW: 150 kDa
Uniprot ID	Q9NY47
Gene ID	9254
Background	Calcium channels mediate the entry of calcium ions into the cell upon membrane polarization. This gene encodes the alpha-2/delta subunit of the voltage-dependent calcium channel complex. The complex consists of the main channel-forming subunit alpha-1, and auxiliary subunits alpha-2/delta, beta, and gamma. The auxiliary subunits function in the assembly and membrane localization of the complex, and modulate calcium currents and channel activation/inactivation kinetics. The subunit encoded by this gene undergoes post-translational cleavage to yield the extracellular alpha2 peptide and a membrane-anchored delta polypeptide. This subunit is a receptor for the antiepileptic drug, gabapentin. Mutations in this gene are associated with early infantile epileptic encephalopathy. Single nucleotide polymorphisms in this gene are correlated with increased sensitivity to opioid drugs. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2014]
Cellular Location	Membrane Single-pass type I membrane protein Colocalizes with CACNA1A in lipid raft fractions.
Tissue Location	Predominantly present in cerebellar cortex. Present in various lung tumor cell lines, while it is absent in normal lung (at protein level). Highly expressed in heart, lung, testis, pancreas and skeletal muscle. Also expressed in kidney, liver, placenta and brain.



Western Blot - Anti-CACNA2D2 Rabbit mAb [70B75A65]

All lanes: R016136 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: 293T (Human embryonic kidney cell) whole cell lysates

Lane 3: Mouse brain whole tissue lysates

Lane 4: Rat brain whole tissue lysates

Lysates/proteins at 10  $\mu$ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 130 kDa

Observed band size: 150 kDa

Developed using the ECL technique (Cat. No. SQ201).