ARG45455
anti-CACNA2D2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CACNA2D2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-Fr, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CACNA2D2
Species	Human
Immunogen	Recombinant protein containing to human CACNA2D2.
Conjugation	Un-conjugated
Alternate Names	CACNA2D2; Calcium Voltage-Gated Channel Auxiliary Subunit Alpha2delta 2; Alpha2delta-2; KIAA0558; Calcium Channel, Voltage-Dependent, Alpha 2/Delta Subunit 2; Voltage-Dependent Calcium Channel Subunit Alpha-2/Delta-2; Voltage-Gated Calcium Channel Subunit Alpha-2/Delta-2; Gene 26; Alpha 2 Delta Calcium Channel Subunit; CACNA2D; CASVDD

Application Instructions

Application table

Application	Dilution
FACS	1 - 3 µg/10^6 cells
ICC/IF	0.5-1 µg/ml
IHC-Fr	
WB	0.1-0.5 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 130 kDa

Properties

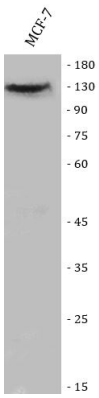
Form	Powder
Purification	Affinity purified
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

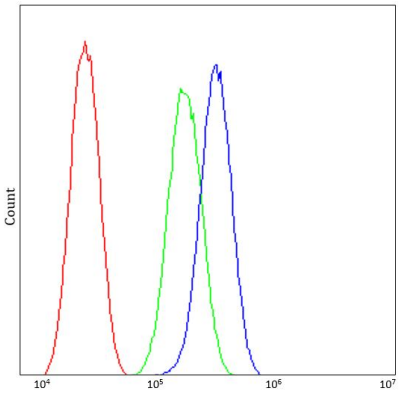
Gene Symbol	CACNA2D2
Gene Full Name	Calcium Voltage-Gated Channel Auxiliary Subunit Alpha2delta 2
Background	Calcium channels mediate the entry of calcium ions into the cell upon membrane polarization. This gene encodes the alpha-2/delta subunit of the voltage-dependent calcium channel complex. The complex 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]
Function	The alpha-2/delta subunit of voltage-dependent calcium channels regulates calcium current density and activation/inactivation kinetics of the calcium channel. Acts as a regulatory subunit for P/Q-type calcium channel (CACNA1A), N-type (CACNA1B), L-type (CACNA1C OR CACNA1D) and possibly T-type (CACNA1G). [UniProt]
Calculated Mw	130 kDa
PTM	Disulfide bond; Glycoprotein. [UniProt]
Cellular Localization	Membrane. [UniProt]

Images



ARG45455 anti-CACNA2D2 antibody WB image

Western blot: MCF-7 stained with ARG45455 anti-CACNA2D2 antibody at 0.5 µg/ml dilution.



ARG45455 anti-CACNA2D2 antibody FACS image

Flow Cytometry: A549 stained with ARG45455 anti-CACNA2D2 antibody at 1 µg/10^6 cells dilution.