

CACNA1A RABBIT PAB

Cat.#: S214200

Product Name: Anti-CACNA1A Rabbit Polyclonal Antibody

Synonyms: BI; EA2; FHM; MHP; APCA; HPCA; MHPI; SCA6; CAV2.1; CACNL1A4

UNIPROT ID: O00555 (Gene Accession - NP_001120694)

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 polyglutamine tract. Expansion of the (CAG)_n-repeats from the normal 4-16 to 21-28 in the coding region is associated with spinocerebellar ataxia 6.

Immunogen: Synthetic peptide of human CACNA1A

Applications: ELISA, IHC

Recommended Dilutions: IHC: 15-50; ELISA: 1000-2000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

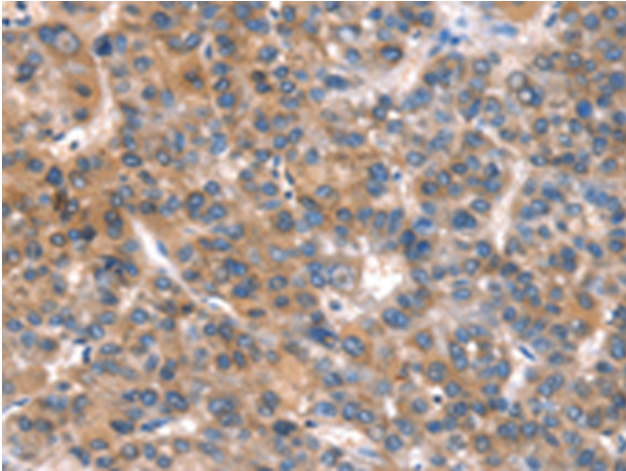
Purification: Antigen affinity purification

Species Reactivity: Human

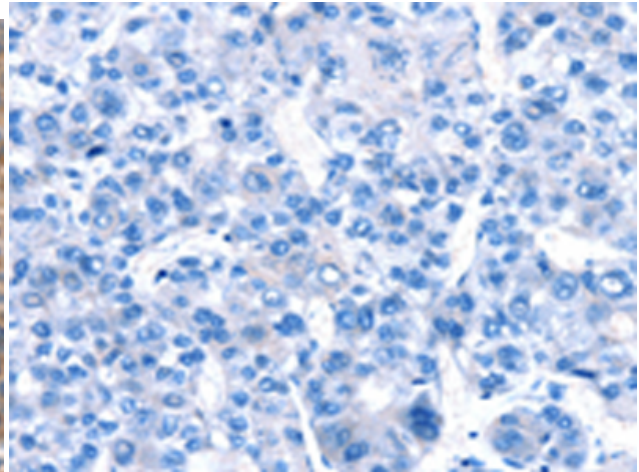
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Cancer, Metabolism, Neuroscience

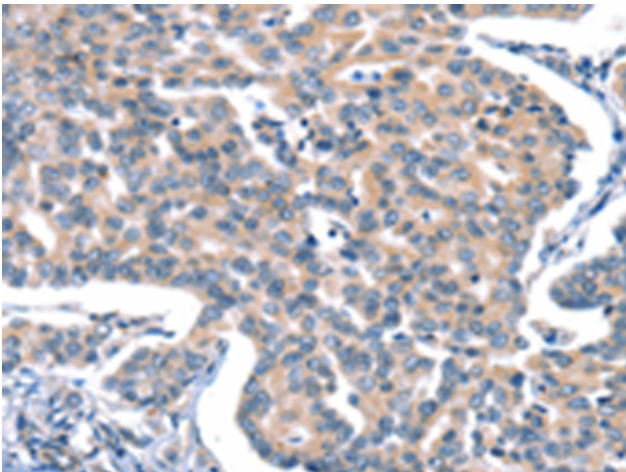
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



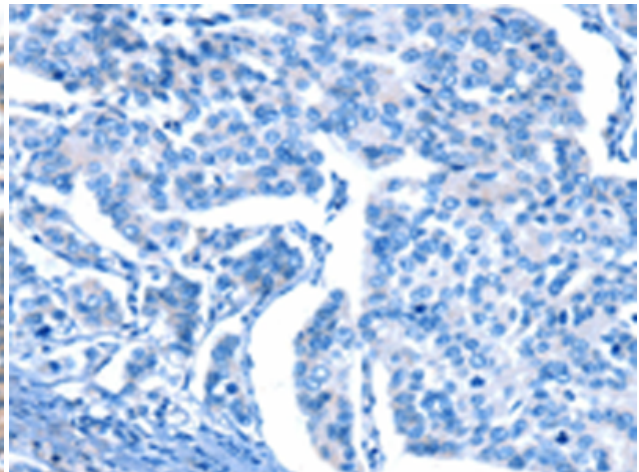
Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using 214200(CACNA1A Antibody) at a dilution of 1/15(Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human liver cancer tissue is first treated with the synthetic peptide and then with 214200(Anti-CACNA1A Antibody) at dilution 1/15.



The image on the left is immunohistochemistry of paraffin-embedded Human gastric cancer tissue using 214200(Anti-CACNA1A Antibody) at a dilution of 1/15.



In comparison with the IHC on the left, the same paraffin-embedded Human gastric cancer tissue is first treated with synthetic peptide and then with D161500(Anti-CACNA1A Antibody) at dilution 1/15.