



## CAC1A Polyclonal Antibody

Cat #: ABP57953

Size: 30µl /100µl /200µl

### Product Information

	<b>Product Name:</b> CAC1A Polyclonal Antibody		
	<b>Applications:</b> IHC-P		<b>Isotype:</b> Rabbit IgG
	<b>Reactivity:</b> Human, Mouse, Rat		
<b>REF</b>	<b>Catalog Number:</b> ABP57953	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Formulation:</b> Liquid		<b>Concentration:</b> 1 mg/ml
	<b>Storage:</b> Store at -20°C. Avoid repeated freeze / thaw cycles.		<b>Note:</b> Contain sodium azide.

**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. CACNA1A encodes the alpha-1A subunit, which is predominantly expressed in neuronal tissue. Mutations in CACNA1A are associated with 2 neurologic disorders, familial hemiplegic migraine and episodic ataxia 2. CACNA1A 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 4-18 to 21-33 in the coding region is associated with spinocerebellar ataxia 6.

**Application Notes:** Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: IHC-P (1:50-1:300).

**Storage Buffer:** PBS, pH 7.4, containing 0.02% Sodium Azide as preservative and 50% Glycerol.

**Storage Instructions:** Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.

