

For Research Use Only

# CACNA1C Polyclonal antibody, PBS Only

Catalog Number: 21774-1-PBS



## Basic Information

<b>Catalog Number:</b> 21774-1-PBS	<b>GenBank Accession Number:</b> BC146846	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 775	
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q13936	
<b>Isotype:</b> IgG	<b>Full Name:</b> calcium channel, voltage-dependent, L type, alpha 1C subunit	
<b>Immunogen Catalog Number:</b> AG16455	<b>Calculated MW:</b> 249 kDa	
	<b>Observed MW:</b> 200 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF-P, FC (Intra), Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Background Information

Calcium voltage-gated channel subunit alpha1 C (CACNA1C, also known as CACH2 and Cav1.2) couples transient activation of inward calcium current to transcriptional regulation and plays an important role in dendritic development, neuronal survival, synaptic plasticity, memory formation, learning, and behavior (PMID: 21248242; 16251435; 20169575; 19047462; 18174367). Genetic variation in CACNA1C has also been associated with depression, schizophrenia, and autism spectrum disorders, as well as changes in brain function and structure in control subjects who have no diagnosable psychiatric illness (PMID: 22705413).

## Storage

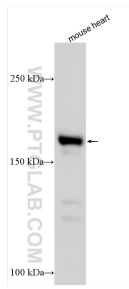
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only

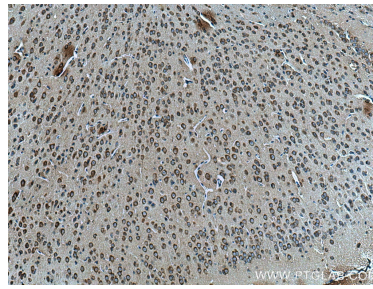
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

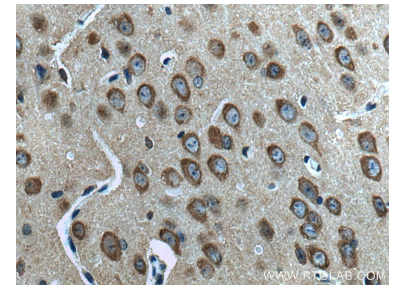
## Selected Validation Data



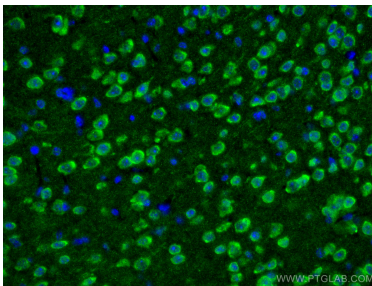
Various lysates were subjected to SDS PAGE followed by western blot with 21774-1-AP (CACNA1C antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 21774-1-PBS in a different storage buffer formulation.



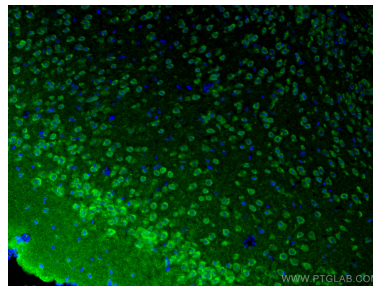
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21774-1-AP (L-VOCC antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 21774-1-PBS in a different storage buffer formulation.



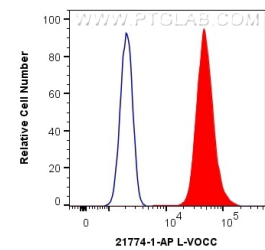
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21774-1-AP (L-VOCC antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 21774-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using L-VOCC antibody (21774-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 21774-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using L-VOCC antibody (21774-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 21774-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human L-VOCC (21774-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 21774-1-PBS in a different storage buffer formulation.