

For Research Use Only

CACNA2D4 Polyclonal antibody

Catalog Number: 26674-1-AP



Basic Information

Catalog Number: 26674-1-AP	GenBank Accession Number: BC150186	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 700 ug/ml by Nanodrop;	GeneID (NCBI): 93589	Recommended Dilutions: WB 1:500-1:2000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q7Z3S7	
Isotype: IgG	Full Name: calcium channel, voltage-dependent, alpha 2/delta subunit 4	
Immunogen Catalog Number: AG24464	Calculated MW: 1137 aa, 128 kDa	
	Observed MW: 100 kDa	

Applications

Tested Applications: WB, IHC, ELISA	Positive Controls:
Species Specificity: human, mouse, rat	WB : mouse brain tissue, rat brain tissue
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : mouse brain tissue,

Background Information

Calcium voltage-gated channel auxiliary subunit alpha2delta 4 (CACNA2D4, also known as RCD4) is a member of the alpha-2/delta subunit family within the voltage-dependent calcium channel complex. The $\alpha 2\delta 4$ subunit of retinal voltage-gated calcium channels (Cav), is crucial for developing and mature exocytotic function of the photoreceptor ribbon synapse (PMID: 29875267). CACNA2D4 is localized to the retina, particularly in photoreceptors, where it is essential for organizing synaptic ribbons and setting Cav1.4 voltage sensitivity (PMID: 28262416). In humans, mutations in CACNA2D4 are associated with autosomal recessive cone dystrophy, a condition that affects the photoreceptor cells in the retina (PMID: 16877424).

Storage

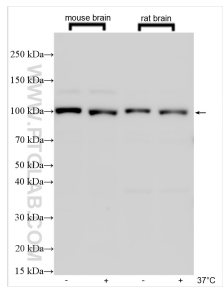
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

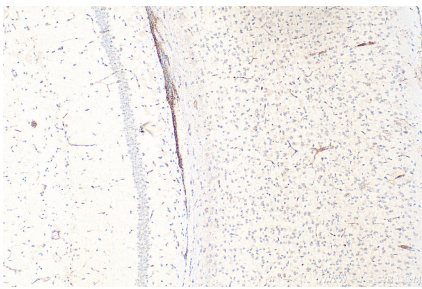
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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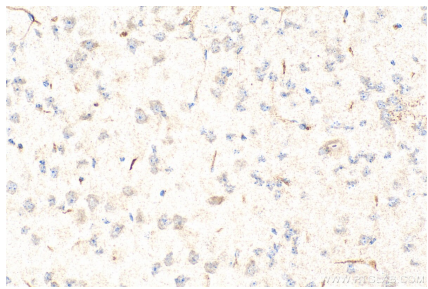
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 26674-1-AP (CACNA2D4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 26674-1-AP (CACNA2D4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 26674-1-AP (CACNA2D4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).