Produktinformation

Forschungsprodukte & Biochemikalien

Zellkultur & Verbrauchsmaterial

Diagnostik & molekulare Diagnostik

Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien
T. +43(0)1 489 3961-0
F. +43(0)1 489 3961-7
mail@szabo-scandic.com
www.szabo-scandic.com

linkedin.com/company/szaboscandic

a1A Calcium Channel. Rabbit Antigen Immunoaffinity Purified Polyclonal

$Ca_V2.1$; P/Q-type Voltage-Gated Ca^{2+} Channel; Cacna1

## BACKGROUND

Voltage-sensitive calcium channels (VSCCs) 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, gene expression, cell motility, cell division and cell death. The isoform alpha-1a gives rise to p and/or q-type calcium currents. P/q-type calcium channels belong to the 'high-voltage activated' (hva) group and are blocked by the funnel toxin (ftx) and by the omega-agatoxin-IVA (omega-aga-IVA). They are however insensitive to dihydropyridines (dhp), and omega- conotoxin-GVIA (omega-ctx-GVIA). voltage-dependent calcium channels are multisubunit complexes, consisting of alpha-1, alpha-2, beta and delta subunits in a 1:1:1:1 ratio. The channel activity is directed by the pore-forming and voltage-sensitive alpha-1 subunit. In many cases, this subunit is sufficient to generate voltage-sensitive calcium channel activity. The auxiliary subunits beta and alpha-2/delta linked by a disulfide bridge regulate the channel activity.

IMMUNOGEN

Synthetic peptide derived from the rat α1A calcium channel conjugated to KLH

Immunohistochemical staining of normal human brain tissue using alpha1A calcium channel antibody (Cat. No. X2391P) at 15 μg/ml
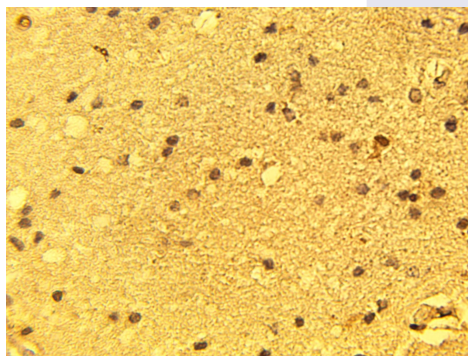
POSITIVE CONTROL/TISSUE EXPRESSION

Rat brain lysate, human brain tissue

COMMENTS

Antibody can be used for Western blotting (1:400 starting dilution). Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Antigen Immunoaffiinity Purification

SHIP CONDITIONS

Ship on gel ice, store at -20ºC immediately upon arrival

STORAGE CUSTOMER

Product should be stored at -20ºC. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Starr,T.V.B et.al 'Primary structure of a calcium channel that is highly expressed in the rat cerebellum' Proc. Natl. Acad. Sci. U.S.A. 88, 5621-5625 (1991)

2. Snutch,T.P.et.al 'Rat brain expresses a heterogeneous family of calcium channels' Proc. Natl. Acad. Sci. U.S.A. 87 (9), 3391-3395 (1990)

3. Yu,A.S et.al. 'Molecular characterization and nephron distribution of a family of transcripts encoding the pore-forming subunit of Ca2+ channels in the kidney' Proc. Natl. Acad. Sci. U.S.A. 89 (21), 10494-10498 (1992)

4. Hansen PB, , et al.'Vascular smooth muscle cells express the alpha(1A) subunit of a P-/Q-type voltage-dependent Ca (2+)Channel, and It is functionally important in renal afferent arterioles.' Circ Res (United States) 87(10) p896-902 (2000)

5. Stephens,G.I. et.al 'The Cav2.1/alpha1A (P/Q-type) voltage-dependent calcium channel mediates inhibitory neurotransmission onto mouse cerebellar Purkinje cells.' Eur J Neurosci 13(10) 1902-12 (2001)

PRODUCT SPECIFIC REFERENCES

Last Modified
11/1/2012

For research use only. Not for use in human diagnostics or therapeutics.

Exalpha Biologicals, Inc.   2 Shaker Road, Bldg. B101   Shirley, MA 01464
Tel: 800.395.1137 Fax: 866.924.5100 www.exalpha.com info@exalpha.com

Page 2 of 2
Cat. No. X2391P