# abcam

# Product datasheet

# Anti-CACNA1H antibody [N55/10] ab84815

# 2 References 2 图像

### 概述

产品名称 Anti-CACNA1H抗体[N55/10]

**小鼠单克隆抗体**[N55/10] to CACNA1H

**宿主** Mouse

特异性 No cross-reactivity against Cav1.3 and Cav3.1

经测试应用 适用于: IHC-P, WB, IHC-Fr 种属反应性 与反应: Mouse, Rat, Human

免疫原 Fusion protein corresponding to Human CACNA1H aa 1000-1300.

Database link: **O95180** 

阳性对照 IHC-P: Human hippocampus tissue. IHC-Fr: Frozen human brain tissue.

常规说明 The clone number has been updated from S55-10 to N55/10, both clone numbers name the same

antibody clone.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 性能

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

存储溶液 Preservative: 0.09% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), PBS

纯**度** Protein G purified

 克隆
 单克隆

 克隆编号
 N55/10

 同种型
 IgG1

1

#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab84815于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/1000.
WB		1/1000. Predicted molecular weight: 259 kDa.
IHC-Fr		1/1000.

******	1-
22111	+-
-	/Cr/ls

#### 功能

Voltage-sensitive calcium channels (VSCC) 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-1H gives rise to T-type calcium currents. T-type calcium channels belong to the "low-voltage activated (LVA)" group and are strongly blocked by nickel and mibefradil. A particularity of this type of channels is an opening at quite negative potentials, and a voltage-dependent inactivation. T-type channels serve pacemaking functions in both central neurons and cardiac nodal cells and support calcium signaling in secretory cells and vascular smooth muscle. They may also be involved in the modulation of firing patterns of neurons which is important for information processing as well as in cell growth processes.

#### 组织特异性

疾病相关

序列相似性

结**构域** 

翻译后修饰

细胞定位

Expressed in kidney, liver, heart, brain. Isoform 2 seems to be testis-specific.

Defects in CACNA1H are a cause of susceptibility to idiopathic generalized epilepsy type 6 (IGE6) [MIM:611942]. IGE is characterized by recurring generalized seizures in the absence of detectable brain lesions and/or metabolic abnormalities. Generalized seizures arise diffusely and simultaneously from both hemispheres of the brain. IGE6 is a polygenic and multifactorial disease.

Belongs to the calcium channel alpha-1 subunit (TC 1.A.1.11) family. CACNA1H subfamily.

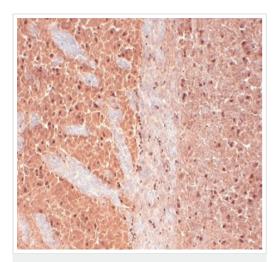
Each of the four internal repeats contains five hydrophobic transmembrane segments (S1, S2, S3, S5, S6) and one positively charged transmembrane segment (S4). S4 segments probably represent the voltage-sensor and are characterized by a series of positively charged amino acids

at every third position.

In response to raising of intracellular calcium, the T-type channels are activated by CaM-kinase II.

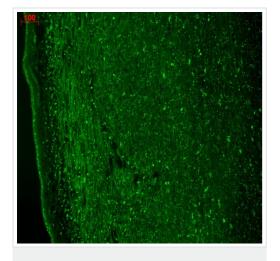
Membrane.

#### 图片



Immunohistochemistry (Frozen sections) - Anti-CACNA1H antibody [N55/10] (ab84815)

Immunohistochemical analysis of frozen Human brain tissue sections staining CACNA1H. Samples were fixed with 10% Formalin solution and incubated with primary antibody at 1:1000 dilution for 1 hour at room temperature. A biotinylated goat antimouse was used as the secondary antibody. Mayer Hematoxylin was used as a nuclear stain.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CACNA1H antibody
[N55/10] (ab84815)

Immunohistochemical analysis (Formalin/PFA-fixed paraffinembedded sections) of human hippocampus tissue labelling CACNA1H with ab84815 at 1:1000 dilution, followed by secondary antibody Goat anti-mouse (green) at 1:50 for 1 hour at RT.

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