abcam

Product datasheet

Anti-TRPV4 antibody ab39260

★★★★★ 11 Abreviews　17 References　画像数 5

製品の概要

製品名	Anti-TRPV4 antibody
製品の詳細	Rabbit polyclonal to TRPV4
アプリケーション	**適用あり:** ICC/IF, IHC-FoFr, WB, IHC-P
種交差性	**交差種:** Mouse, Horse
免疫原	Synthetic peptide conjugated to KLH derived from within residues 850 to the C-terminus of Mouse TRPV4.Immunogen の所有権に関して(Peptide available as ab39471.)
ポジティブ・コントロール	This antibody gave a positive signal in Mouse Brain tissue lysate.
特記事項	Although some of our customers have had good results in Human and Rat (89% homology with the immunogen), we do not batch test this antibody in these species. Due to the polyclonal nature of this antibody, some batches many not work in Human or Rat.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

Our Abpromise guarantee covers the use of **ab39260** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
ICC/IF		Use a concentration of 5 µg/ml.

アプリケーション	Abreviews	特記事項
IHC-FoFr	★★★★★	1/300.
WB	★★★★★	Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 100 kDa (predicted molecular weight: 98 kDa).
IHC-P	★★★★★	1/200. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

ターゲット情報

機能

Non-selective calcium permeant cation channel probably involved in osmotic sensitivity and mechanosensitivity. Activation by exposure to hypotonicity within the physiological range exhibits an outward rectification. Also activated by low pH, citrate and phorbol esters. Increase of intracellular Ca(2+) potentiates currents. Channel activity seems to be regulated by a calmodulin-dependent mechanism with a negative feedback mechanism. Promotes cell-cell junction formation in skin keratinocytes and plays an important role in the formation and/or maintenance of functional intercellular barriers. Acts as a regulator of intracellular Ca(2+) in synoviocytes. Plays an obligatory role as a molecular component in the nonselective cation channel activation induced by 4-alpha-phorbol 12,13-didecanoate and hypotonic stimulation in synoviocytes and also regulates production of IL-8.

組織特異性

Found in the synoviocytes from patients with (RA) and without (CTR) rheumatoid arthritis (at protein level).

関連疾患

Brachyolmia 3
Spondylometaphyseal dysplasia Kozlowski type
Metatropic dysplasia
Distal spinal muscular atrophy, congenital non-progressive
Charcot-Marie-Tooth disease 2C
Scapuloperoneal spinal muscular atrophy
Spondyloepiphyseal dysplasia Maroteaux type
Parastremmatic dwarfism
Digital arthropathy-brachydactyly, familial

配列類似性

Belongs to the transient receptor (TC 1.A.4) family. TrpV subfamily. TRPV4 sub-subfamily. Contains 3 ANK repeats.

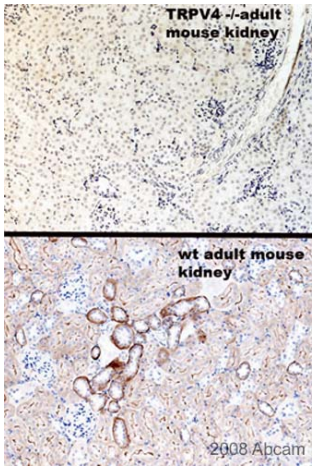
翻訳後修飾

Phosphorylation results in enhancement of its channel function.

細胞内局在

Cell membrane and Cell membrane. Cell junction > adherens junction. Assembly of the putative homotetramer occurs primarily in the endoplasmic reticulum.

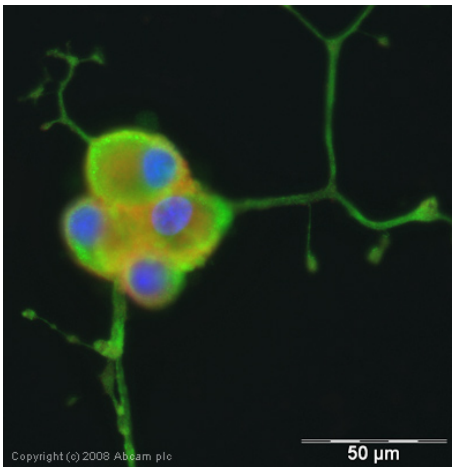
画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - TRPV4 antibody (ab39260)

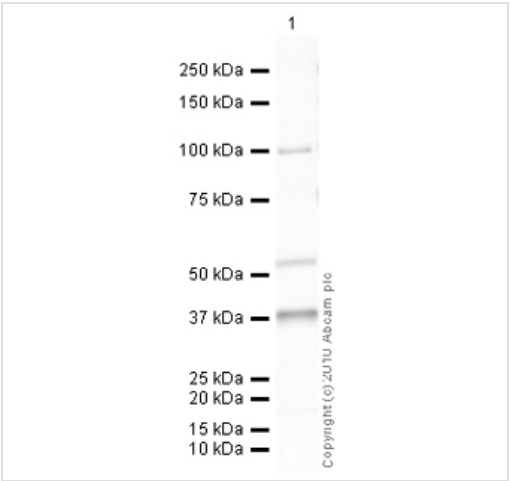
This image is courtesy of an Abreview submitted by Mr Carl Hobbs

ab39260 staining of TRPV4 -/- (upper panel) and wildtype (lower panel) adult mouse kidney tissue sections, showing good immunostaining in the wildtype tissue and no immunostaining in the TRPV4 -/- tissue. Formalin/PFA-fixed paraffin-embedded sections of mouse kidney tissue were incubated with ab39260 (1/200) for 2 hours. Antigen retrieval was performed by heat induction in citrate buffer pH 6.0. A biotin-conjugated goat anti-rabbit antibody was used as the secondary.



Immunocytochemistry/ Immunofluorescence - TRPV4 antibody (ab39260)

ICC/IF image of ab39260 stained PC12 cells. The cells were 4% PFA fixed (10 min), permabilised in 0.1% PBS-Tween (20 min) and incubated with the antibody (ab39260, 5µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).



Western blot - TRPV4 antibody (ab39260)

Anti-TRPV4 antibody (ab39260) at 2 µg/ml + Brain (Mouse) Tissue Lysate at 25 µg

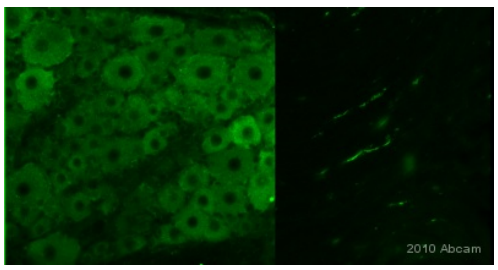
Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution
Developed using the ECL technique

Performed under reducing conditions.

Predicted band size : 98 kDa
Observed band size : 100 kDa
Additional bands at : 37 kDa,54 kDa. We are unsure as to the identity of these extra bands.

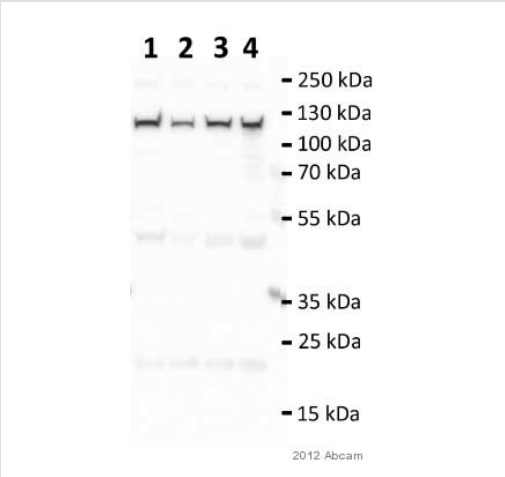
Exposure time : 1 minute



Immunohistochemistry (PFA perfusion fixed frozen sections) - TRPV4 antibody (ab39260)

This image is courtesy of an Abreview submitted by Sophie Pezet, ESPCI, France

IHC-FoFr image of TRPV4 staining on Rat DRG sections. The sections used came from animals perfused fixed with Paraformaldehyde 4%, in phosphate buffer 0.2M. Following postfixation in the same fixative overnight, the tissues were cryoprotected in sucrose 30% overnight. Tissues were then cut using a cryostat. The image shows DRG neurons (left), nerve taken at the level of the root (right)



Western blot - Anti-TRPV4 antibody (ab39260)

All lanes : Anti-TRPV4 antibody (ab39260) at 1 µg/ml

Lane 1 : Whole cell lysate prepared from MEF cells
Lane 2 : Whole cell lysate prepared from F9 cells
Lane 3 : Whole cell lysate prepared from GC-1 cells
Lane 4 : Whole cell lysate prepared from NIH-3T3 cells

Lysates/proteins at 20 µg per lane.

Secondary
HRP conjugated pig anti-rabbit polyclonal at 1/5000 dilution
Developed using the ECL technique

Predicted band size : 98 kDa
Observed band size : 125 kDa

Exposure time : 5 minutes

Image courtesy of an anonymous Abreview

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