

DATASHEET
TRPV4 Rabbit Polyclonal Antibody
CAT. NO. APA08175
KEY FEATURES

Target	TRPV4	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Chicken, Pig	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Non-selective calcium permeant cation channel involved in osmotic sensitivity and mechanosensitivity . Activation by exposure to hypotonicity within the physiological range exhibits an outward rectification . Also activated by heat, 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 .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to TRPV4
Specificity	Recognizes endogenous levels of TRPV4 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TRPV4. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 98 kD; Observed: 110 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	VRL2; VROAC; Transient receptor potential cation channel subfamily V member 4; TrpV4; Osm-9-like TRP channel 4; OTRPC4; Transient receptor potential protein 12; TRP12; Vanilloid receptor-like channel 2; Vanilloid receptor-like protein 2; VRL-2; Vanilloid receptor-related osmotically-activated channel; VR-OAC
Gene Symbol	TRPV4
Entrez Gene	59341(Human); 63873(Mouse); 66026(Rat)
SwissProt	Q9HBA0(Human); Q9EPK8(Mouse); Q9ERZ8(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

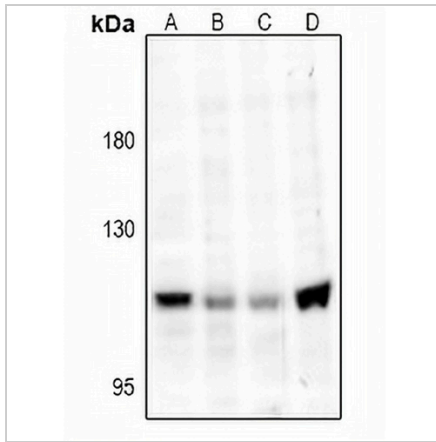
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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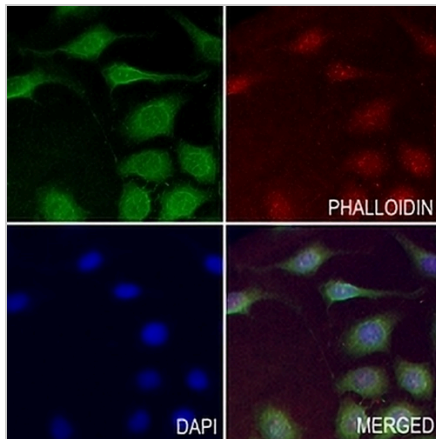
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DATA



Western blot analysis of TRPV4 expression in A375 (A), PC3 (B), 3T3L1 (C), H9C2 (D) whole cell lysates. (Predicted band size: 98 kD; Observed band size: 110 kD)



Immunofluorescent analysis of TRPV4 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.