

Datasheet for ABIN1049441
anti-TRPV4 antibody (Internal Region)**2** Images**1** Publication[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	TRPV4
Binding Specificity:	Internal Region
Reactivity:	Human, Mouse, Rat, Cow, Pig, Dog, Monkey, Hamster, Horse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Brand:	IHC-plus™
Immunogen:	Synthetic 20 amino acid peptide from internal region of human TRPV4. Percent identity with other species by BLAST analysis: Human, Gorilla, Gibbon, Monkey, Marmoset, Mouse, Rat, Hamster, Panda, Bovine, Dog, Horse, Pig (100%), Elephant, Rabbit (95%), Turkey, Chicken, Platypus (90%), Xenopus (85%), Stickleback, Zebrafish (80%). Type of Immunogen: Synthetic peptide
Specificity:	Human TRPV4. BLAST analysis of the peptide immunogen showed no homology with other human proteins.
Predicted Reactivity:	Percent identity with other species by BLAST analysis: Human, Gorilla, Gibbon, Monkey, Marmoset, Mouse, Rat, Hamster, Panda, Bovine, Dog, Horse, Pig (100%) Elephant, Rabbit (95%)

Product Details

Turkey, Chicken, Platypus (90%) Xenopus (85%) Stickleback, Zebrafish (80%).

Purification: Immunoaffinity purified

Target Details

Target: TRPV4

Alternative Name: TRPV4 ([TRPV4 Products](#))

Background: Name/Gene ID: TRPV4

Subfamily: Calcium channel - TRP

Family: Ion Channel

Synonyms: TRPV4, CMT2C, HMSN2C, OTRPC4, SSQTL1, VR-OAC, VRL-2, Osm-9-like TRP channel 4, SPSMA, TRP12, VRL2, VROAC, SMAL

Gene ID: 59341

Pathways: [Hormone Transport](#), [Cell-Cell Junction Organization](#)

Application Details

Application Notes: Approved: IF, IHC, IHC-Fr, IHC-P (5 - 10 µg/mL), WB

Comment: Target Species of Antibody: Human

Assay Procedure: **The IHC-pro Immunohistochemistry Protocol**

Tissue Preparation

Formalin fixation and embedding in paraffin wax

Tissue Sectioning

Make 4-µm sections and place on pre-cleaned and charged microscope slides.

Heat in a tissue-drying oven for 45 minutes at 60°C

Deparaffinization

Wash slides in 3 changes of xylene – 5 minutes each at room temperature.

Rehydration

Wash slides in 3 changes of 100% alcohol – 3 minutes each at room temperature.

Wash slides in 2 changes of 95% alcohol – 3 minutes each at room temperature.

Wash slides in 1 change of 80% alcohol – 3 minutes at room temperature.

Rinse slides in gentle running distilled water – 5 minutes at room temperature.

Antigen retrieval

Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes

Remove from heat and let stand at room temperature in buffer - 20 minutes

Rinse in 1X TBS with Tween (TBST) – 1 minute at room temperature.

Immunostaining

Do not allow tissues to dry at any time during the staining procedure.

Apply a universal protein block – 20 minutes at room temperature.

Drain protein block from slides, apply diluted primary antibody – 45 minutes at room temperature.

Rinse slides in 1X TBST - 1 minute at room temperature.

Apply a biotinylated secondary antibody (specific to the host of the primary antibody) - 30 minutes at room temperature.

Rinse slides 1X TBST – 1 minute at room temperature.

Apply alkaline phosphatase streptavidin – 30 minutes at room temperature.

Rinse slides in 1X TBST - 1 minute at room temperature.

Apply alkaline phosphatase chromogen substrate – 30 minutes at room temperature.

Wash slides in distilled water – 1 minute at room temperature.

Dehydrate

This method should only be used if the chromogen substrate is alcohol insoluble.

Wash slides in 2 changes of 80% alcohol – 1 minute each at room temperature.

Wash slides in 2 changes of 95% alcohol – 1 minute each at room temperature.

Wash slides in 3 changes of 100% alcohol – 1 minute each at room temperature.

Wash slides in 3 changes of xylene – 1 minute each at room temperature.

Apply coverslip

Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Concentration:	Lot specific
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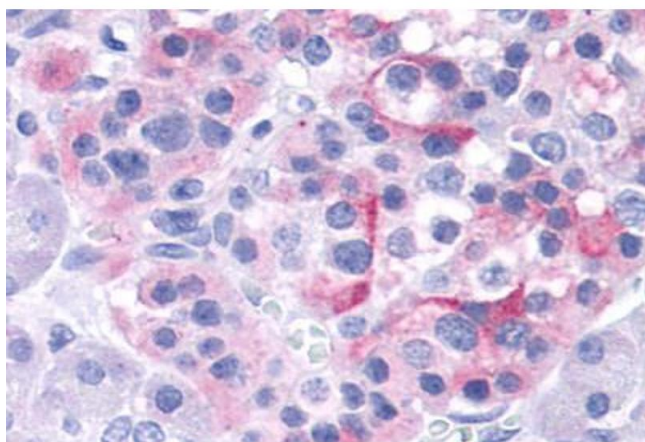
Handling

Buffer:	PBS, less than 0.1 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	Aliquot and store undiluted at -20°C or below for up to 1 year. Can be stored undiluted at 4°C for up to 1 month. Avoid freeze-thaw cycles.
Expiry Date:	12 months

Publications

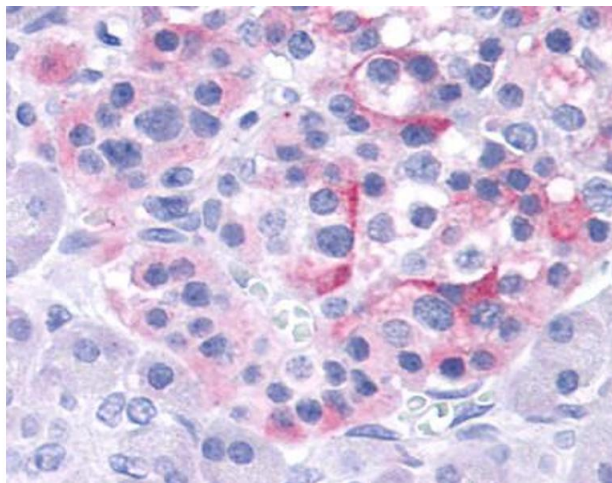
Product cited in:	He, Nitti, Piras, Lisa Furfaro, Traverso, Pronzato, Mann: "Heme oxygenase-1-derived bilirubin protects endothelial cells against high glucose-induced damage." in: Free radical biology & medicine , Vol. 89, pp. 91-98, (2015) (PubMed).
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Images



Immunohistochemistry

Image 1. Anti-TRPV4 antibody ABIN1049441 IHC staining of human pancreas, islet. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval.



Immunohistochemistry

Image 2. Anti-TRPV4 antibody IHC of human pancreas, islet. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval.