

Product datasheet

Anti-TRPV5 antibody [EPR8875] ab137028

Recombinant RabMAb

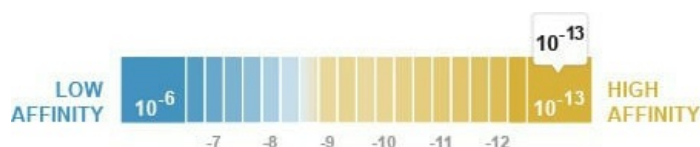
[5 References](#) [7 Images](#)

Overview

Product name	Anti-TRPV5 antibody [EPR8875]
Description	Rabbit monoclonal [EPR8875] to TRPV5
Host species	Rabbit
Specificity	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
Tested applications	Suitable for: WB, IHC-P Unsuitable for: ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal kidney, Human small intestine, HepG2, 293T, Saos-2, Mouse heart, and Rat heart lysates. IHC-P: human breast and kidney tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Dissociation constant (K_D)	K _D = 5.70 x 10 ⁻¹³ M



[Learn more about K_D](#)

Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8875
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab137028 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

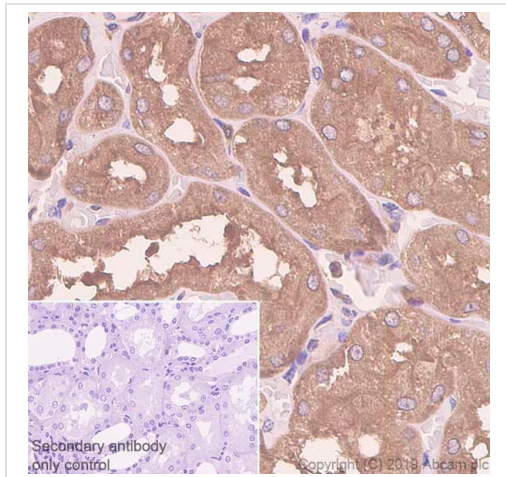
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Predicted molecular weight: 83 kDa.
IHC-P		1/100 - 1/300. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. See IHC antigen retrieval protocols

Application notes Is unsuitable for ICC/IF.

Target

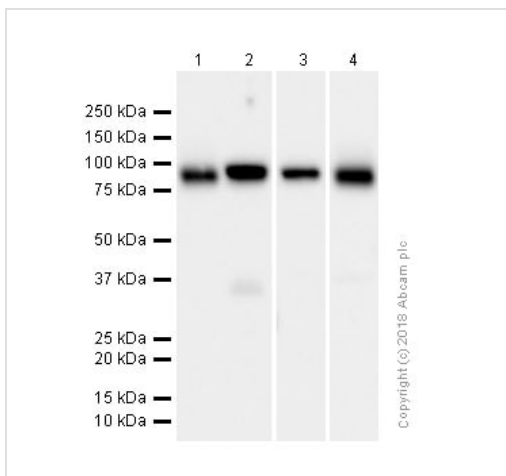
Function	Constitutively active calcium selective cation channel thought to be involved in Ca(2+) reabsorption in kidney and intestine. The channel is activated by low internal calcium level and the current exhibits an inward rectification. A Ca(2+)-dependent feedback regulation includes fast channel inactivation and slow current decay. Heteromeric assembly with TRPV6 seems to modify channel properties. TRPV5-TRPV6 heteromultimeric concatemers exhibit voltage-dependent gating.
Tissue specificity	Expressed at high levels in kidney, small intestine and pancreas, and at lower levels in testis, prostate, placenta, brain, colon and rectum.
Sequence similarities	Belongs to the transient receptor (TC 1.A.4) family. TrpV subfamily. TRPV5 sub-subfamily. Contains 5 ANK repeats.
Post-translational modifications	Glycosylated.
Cellular localization	Apical cell membrane. Colocalized with S100A10 and ANAX2 along the apical domain of kidney distal tubular cells (By similarity). The expression of the glycosylated form in the cell membrane is increased in the presence of WNK3.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPV5 antibody [EPR8875] (ab137028)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling TRPV5 with purified ab137028 at 1:300 dilution (0.95 µg/ml). Heat mediated antigen retrieval was performed using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-TRPV5 antibody [EPR8875] (ab137028)

All lanes : Anti-TRPV5 antibody [EPR8875] (ab137028) at 1/10000 dilution (Purified)

Lane 1 : Human fetal kidney lysates

Lane 2 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

Lane 3 : Mouse heart lysates

Lane 4 : Rat heart lysates

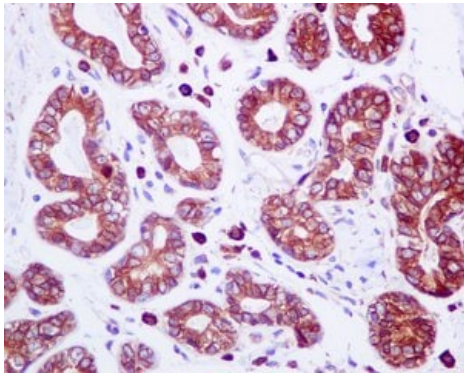
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 83 kDa

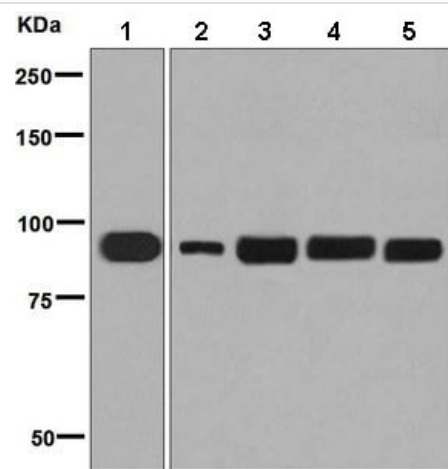
Observed band size: 90 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPV5 antibody [EPR8875] (ab137028)

Immunohistochemical analysis of paraffin-embedded Human breast tissue labelling TRPV5 with unpurified ab137028 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-TRPV5 antibody [EPR8875] (ab137028)

All lanes : Anti-TRPV5 antibody [EPR8875] (ab137028) at 1/10000 dilution (unpurified)

Lane 1 : Fetal kidney lysate

Lane 2 : Human small intestine lysate

Lane 3 : 293T cell lysate

Lane 4 : HepG2 cell lysate

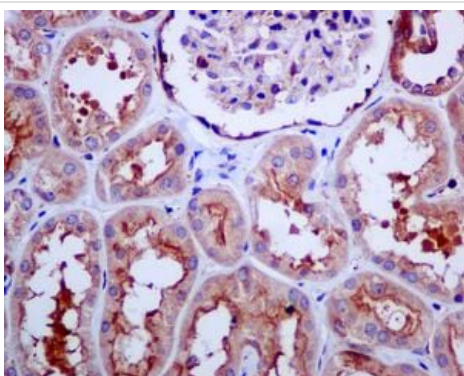
Lane 5 : Saos-2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

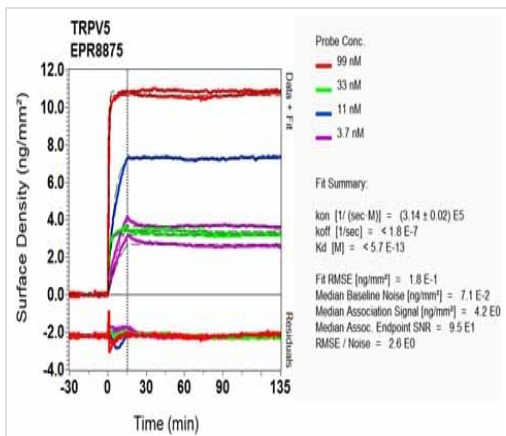
Predicted band size: 83 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPV5 antibody [EPR8875] (ab137028)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labelling TRPV5 with unpurified ab137028 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



SPR Scanning - Anti-TRPV5 antibody [EPR8875]
(ab137028)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-TRPV5 antibody [EPR8875] (ab137028)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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