

Product datasheet

Anti-TRPS1 antibody [EPR16171] α b209664

Recombinant **RabMAb**

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

Overview

Product name	Anti-TRPS1 antibody [EPR16171]
Description	Rabbit monoclonal [EPR16171] to TRPS1
Host species	Rabbit
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human breast, endometrium cancer tissues; Human breast, endometrium 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

Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16171
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab209664 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
IHC-P		1/8000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function

Transcriptional repressor. Binds specifically to GATA sequences and represses expression of GATA-regulated genes at selected sites and stages in vertebrate development. Regulates chondrocyte proliferation and differentiation. Executes multiple functions in proliferating chondrocytes, expanding the region of distal chondrocytes, activating proliferation in columnar cells and supporting the differentiation of columnar into hypertrophic chondrocytes.

Tissue specificity

Ubiquitously expressed in the adult. Found in fetal brain, lung, kidney, liver, spleen and thymus. More highly expressed in androgen-dependent than in androgen-independent prostate cancer cells.

Involvement in disease

Defects in TRPS1 are the cause of tricho-rhino-phalangeal syndrome type 1 (TRPS1) [MIM:190350]. TRPS1 is an autosomal dominant disorder characterized by craniofacial and skeletal abnormalities. It is allelic with tricho-rhino-phalangeal type 3. Typical features include sparse scalp hair, a bulbous tip of the nose, protruding ears, a long flat philtrum and a thin upper vermilion border. Skeletal defects include cone-shaped epiphyses at the phalanges, hip malformations and short stature.

Defects in TRPS1 are a cause of tricho-rhino-phalangeal syndrome type 2 (TRPS2) [MIM:150230]. A syndrome that combines the clinical features of trichorhinophalangeal syndrome type 1 and multiple exostoses type 1. Affected individuals manifest multiple dysmorphic facial features including large, laterally protruding ears, a bulbous nose, an elongated upper lip, as well as sparse scalp hair, winged scapulae, multiple cartilaginous exostoses, redundant skin, and mental retardation. Note=A chromosomal aberration resulting in the loss of functional copies of TRPS1 and EXT1 has been found in TRPS2 patients.

Defects in TRPS1 are the cause of tricho-rhino-phalangeal syndrome type 3 (TRPS3) [MIM:190351]. TRPS3 is an autosomal dominant disorder characterized by craniofacial and skeletal abnormalities. It is allelic with tricho-rhino-phalangeal type 1. In TRPS3 a more severe brachydactyly and growth retardation are observed.

Sequence similarities

Contains 7 C2H2-type zinc fingers.
Contains 1 GATA-type zinc finger.

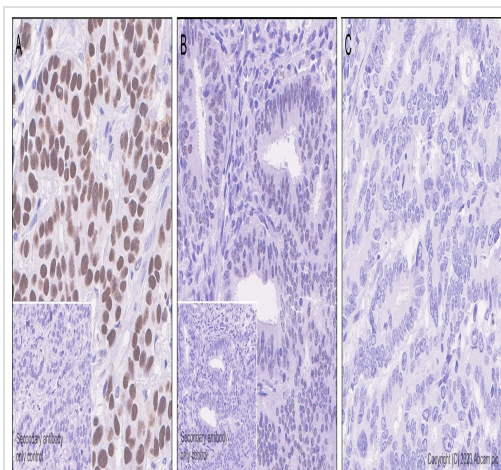
Post-translational modifications

Sumoylated. Sumoylation in the repressor domain inhibits the transcription repression activity. Sumoylation on Lys-1201 is the major site. Appears to be sumoylated on multiple sites.

Cellular localization

Nucleus.

Images



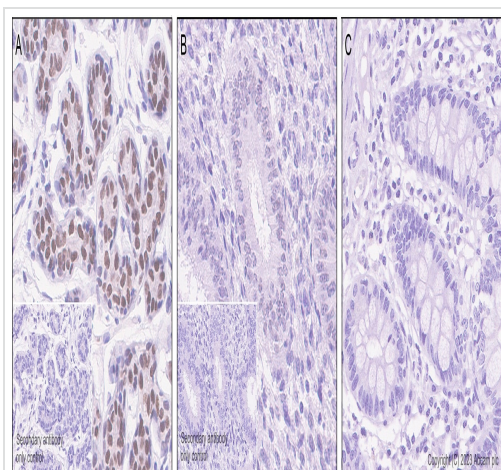
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPS1 antibody [EPR16171] (ab209664)

Immunohistochemical analysis of Paraffin-embedded sections human breast cancer (A), endometrium cancer(B) and colon cancer (C) tissue labelling TRPS1 with ab209664 at 1/18000 dilution, followed by a ready to use secondary Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Counter stained with Haematoxylin. Secondary antibody only control: Used PBS instead of primary antibody.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

Positive staining on (A) human breast cancer; weak staining on (B) human endometrial cancer; no staining on (C) human colon cancer. The section was incubated with ab209664 for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



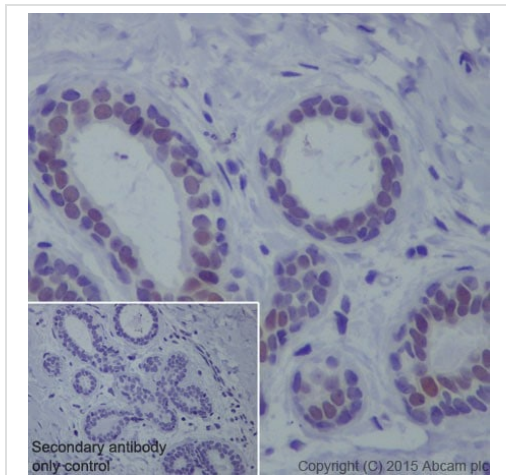
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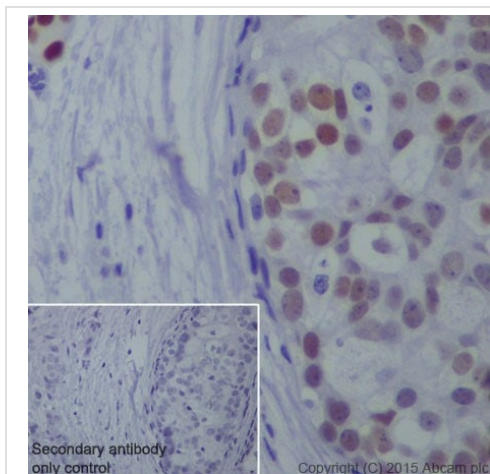


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPS1 antibody [EPR16171] (ab209664)

Immunohistochemical analysis of paraffin-embedded human breast tissue labeling TRPS1 with ab209664 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Nuclear staining on epithelium of human breast is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

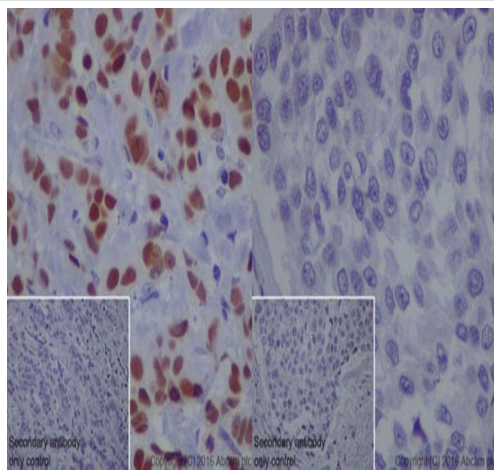


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Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPS1 antibody [EPR16171] (ab209664)

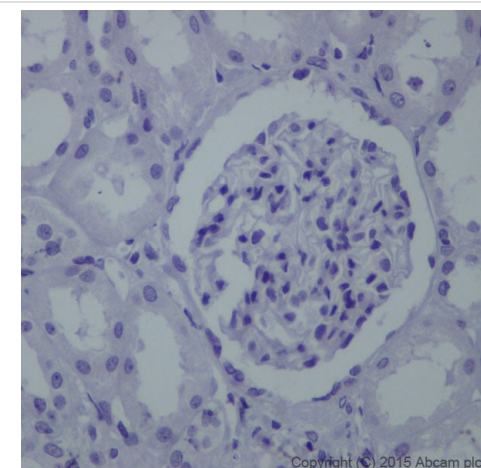
Immunohistochemical analysis of paraffin-embedded human breast cancer (stage II, left ; stage III right) tissue labeling TRPS1 with ab209664 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

(Left): Nucleus staining in the cancer cells of breast cancer stage II clinical case; (Right): Negative staining in the breast cancer stage III clinical case; The high expression of TRPS1 may facilitate improved survival of this breast cancer stage II case.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.







Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRPS1 antibody [EPR16171] (ab209664)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling TRPS1 with ab209664 at 1/8000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Negative staining on the human kidney. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-TRPS1 antibody [EPR16171] (ab209664)

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