abcam

Product datasheet

Anti-TRPS1 antibody ab125197

★★★★☆ **1 Abreviews**   **1 References**   4 Images

Overview

Product name	Anti-TRPS1 antibody
Description	Rabbit polyclonal to TRPS1
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP, IHC-P
Species reactivity	**Reacts with:** Human **Predicted to work with:** Rat, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Turkey, Pig, Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Platypus
Immunogen	Synthetic peptide, corresponding to a region within amino acids 1000-1050 of Human TRPS1 (AAG21134.1).
Positive control	WB: Jurkat, 293T, HeLa whole cell lysate. IP: HeLa cells. IHC-P: Human breast carcinoma tissue.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate pH 7 to 8.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee   Our **Abpromise guarantee** covers the use of ab125197 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)	1/2000 - 1/10000. Predicted molecular weight: 142 kDa.
IP		Use at 2-10 µg/mg of lysate.
IHC-P		1/500 - 1/2000.

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.
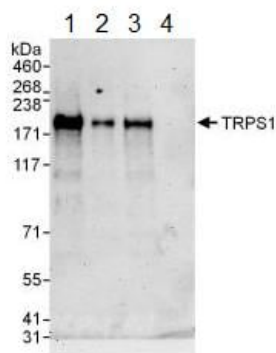Contains 1 GATA-type zinc finger.

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

Western blot - Anti-TRPS1 antibody (ab125197)

All lanes : Anti-TRPS1 antibody (ab125197) at 0.1 µg/ml

Lane 1 : HeLa whole cell lysate at 50 µg

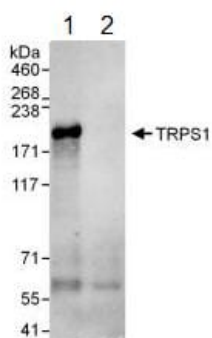**Lane 2 :** HeLa whole cell lysate at 15 µg

Lane 3 : 293T whole cell lysate at 50 µg

Lane 4 : Jurkat whole cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 142 kDa

Exposure time: 3 minutes

Immunoprecipitation - Anti-TRPS1 antibody
(ab125197)

ab125197 at 1 µg/ml staining TRPS1 by WB, following
immunoprecipitation of whole cell lysate from HeLa cells.
Lane 1; IP using ab125197 at 6 µg/mg lysate.
Lane 2; IP using control IgG.
1 mg of lysate was used for IP and 20% of IP was loaded. Detection
utilised Chemiluminescence with a 30 second exposure.
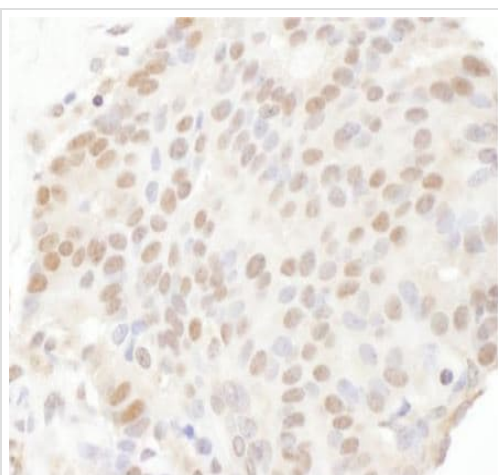
Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-TRPS1 antibody
(ab125197)

Paraffin embedded human breast carcinoma tissue stained for
TRPS1 using ab125197 at 1/1000 dilution in immunohistochemical
analysis.

Western blot - Anti-TRPS1 antibody (ab125197)

This image is courtesy of an anonymous Abreview
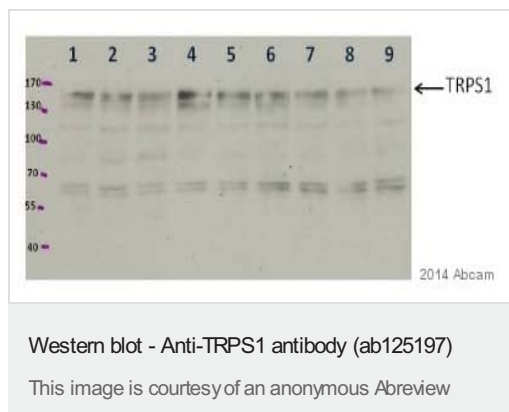
All lanes : Anti-TRPS1 antibody (ab125197) at 1/500 dilution

Lane 1 : Ha-Ras-transformed EpH4 cells - nuclear extracts

Lanes 2-3 : EpF-2 and EpF-1 (EpH4 subclones expressing high amounts of Zeb1 and Zeb2 mRNA) - nuclear extracts

Lane 4 : EpH4 (parental) - nuclear extracts

Lane 5 : EpF-2 - nuclear extracts

Lanes 6-7 : EpF-Z1.1 and EpF-Z1.2 (EpF-1 clones transfected with siRNA to knockdown Zeb1) - nuclear extracts

Lanes 8-9 : EpF-Z2.1 and EpF-Z2.2 (EpF-1 clones transfected with siRNA to knockdown Zeb2) - nuclear extracts

Lysates/proteins at 25 μg per lane.

Secondary

All lanes : HRP-conjugated donkey anti-rabbit IgG polyclonal at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 142 kDa

Exposure time: 20 seconds

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

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