abcam

Product datasheet

Anti-Tbx3 antibody ab99302

★★★★★ <u>5 Abreviews</u> <u>26 References</u> 3 Images

Overview

Product name Anti-Tbx3 antibody

Description Rabbit polyclonal to Tbx3

Host species Rabbit

Specificity From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch,

please contact our Scientific Support who will be happy to help.

Tested applications Suitable for: ICC/IF, WB

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Chicken

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive controlThis antibody gave a positive signal in nuclear extracts from the following cell lines: HepG2;

MCF7. IHC-P (FFPE): Human Placenta (Normal) tissue.

General notesThe 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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab99302 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
ICC/IF	★★★★★ (2)	Use a concentration of 5 µg/ml.
WB	★★★★☆ (3)	Use a concentration of 1 µg/ml. Detects a band of approximately 79 kDa (predicted molecular weight: 79 kDa).

Application notes Is unsuitable for IHC-P.

Target

Function Transcriptional repressor involved in developmental processes. Probably plays a role in limb

pattern formation.

Tissue specificity Widely expressed.

Involvement in diseaseDefects in TBX3 are the cause of ulnar-mammary syndrome (UMS) [MIM:181450]. UMS is

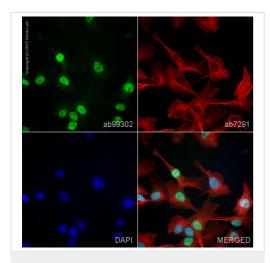
characterized by ulnar ray defects, obesity, hypogenitalism, delayed puberty, hypoplasia of

nipples and apocrine glands.

Sequence similarities Contains 1 T-box DNA-binding domain.

Cellular localization Nucleus.

Images



Immunocytochemistry/ Immunofluorescence - Anti-Tbx3 antibody (ab99302)

ab99302 staining Tbx3 in HepG2 cells. The cells were fixed with 4% Paraformaldehyde (10min), permeabilized with 0.1%PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab99302 at 5µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control, at 1/1000 dilution. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor® 488) pre-adsorbed, at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594) pre-adsorbed, at 1/1000 dilution (shown in pseudocolor red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Perkin Elmer, Operetta CLS).

All lanes: Anti-Tbx3 antibody (ab99302) at 1 µg/ml

Lane 1 : HepG2 (Human hepatocellular liver carcinoma cell line) Nuclear Lysate

Lane 2: MCF7 nuclear extract lysate (ab14860)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) preadsorbed

(ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 79 kDa **Observed band size:** 79 kDa

Additional bands at: 22 kDa, 77 kDa (possible isoform). We are

unsure as to the identity of these extra bands.

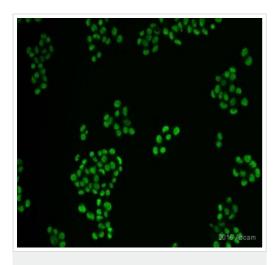
Exposure time: 3 minutes

Ab99302 should recognise all three isoforms of Tbx3. We are probably observing Isoform I and Isoform II on this Western Blot



Western blot - Anti-Tbx3 antibody (ab99302)

image. The molecular weights of Isoform I and Isoform II are 77- and 79-kDa respectively.



Immunocytochemistry/ Immunofluorescence - Anti-Tbx3 antibody (ab99302)

This image is courtesy of an Abreview by Zoe Burke.

ab99302 staining Tbx3 in the AR42J-B13 rat pancreatic tumor cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton/PBS and blocked with blocking buffer for 60 minutes at room temperature. Samples were incubated with primary antibody (1/100) for 18 hours at 4°C. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody at a dilution of 1/5000.

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