

## Product datasheet

# Anti-TEAD4 antibody [5H3] ab58310

★★★★☆ [4 Abreviews](#) [80 References](#) [3 Images](#)

### Overview

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<b>Product name</b>	Anti-TEAD4 antibody [5H3]
<b>Description</b>	Mouse monoclonal [5H3] to TEAD4
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant fragment, corresponding to amino acids 151-261 of Human TEAD4
<b>General notes</b>	<p>This product was changed from ascites to tissue culture supernatant on 30<sup>th</sup> May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>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.</p> <p>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&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.40 Constituents: 8% Sodium chloride, 0.6% Dibasic monohydrogen sodium phosphate, 0.2% Monobasic dihydrogen potassium phosphate, 0.2% Potassium chloride, 91% Water
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	5H3
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab58310 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)	Use at an assay dependent concentration. Predicted molecular weight: 48 kDa.

## Target

### Function

Transcription factor which plays a key role in the Hippo signaling pathway, a pathway involved in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein MST1/MST2, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Acts by mediating gene expression of YAP1 and WWTR1/TAZ, thereby regulating cell proliferation, migration and epithelial mesenchymal transition (EMT) induction. Binds specifically and non-cooperatively to the Sph and GT-IIC 'enhansons' (5'-GTGGAATGT-3') and activates transcription. Binds to the M-CAT motif.

### Tissue specificity

Preferentially expressed in skeletal muscle. Lower levels in pancreas, placenta, and heart.

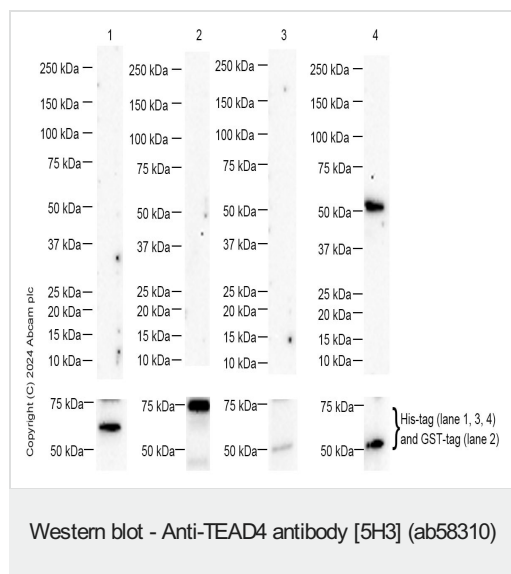
### Sequence similarities

Contains 1 TEA DNA-binding domain.

### Cellular localization

Nucleus.

## Images



**All lanes :** Anti-TEAD4 antibody [5H3] (ab58310) at 1/1000 dilution

**Lane 1 :** TEAD1 Human Recombinant Protein

**Lane 2 :** TEAD2 Human Recombinant Protein

**Lane 3 :** TEAD3 Human Recombinant Protein

**Lane 4 :** TEAD4 Human Recombinant Protein

Lysates/proteins at 20 µg per lane.

### Secondary

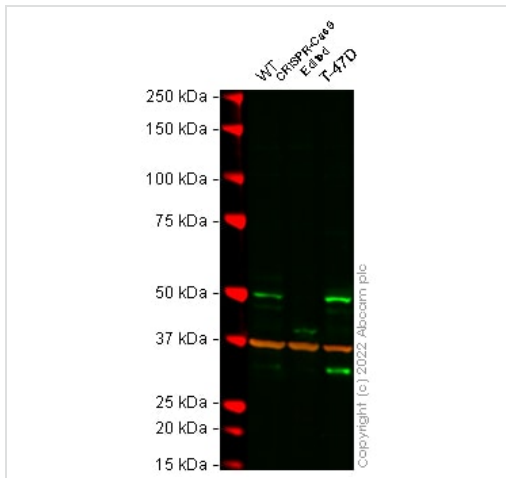
**All lanes :** Goat Anti-mouse IgG at 1/5000 dilution

**Predicted band size:** 48 kDa

**Observed band size:** 50-75 kDa

**Exposure time:** 180 seconds

**Blocking/Diluting buffer and concentration:** 5% NFDM/TBST.



Western blot - Anti-TEAD4 antibody [5H3] (ab58310)

**All lanes :** Anti-TEAD4 antibody [5H3] (ab58310) at 1  $\mu$ g

**Lane 1 :** Wild-type A549 cell lysate

**Lane 2 :** TEAD4 CRISPR-Cas9 edited A549 cell lysate

**Lane 3 :** T-47D cell lysate

Lysates/proteins at 20  $\mu$ g per lane.

### Secondary

**All lanes :** Goat anti-Mouse IgG H&L 800CW and Goat anti-Rabbit IgG H&L 680RD at 1/20000 dilution

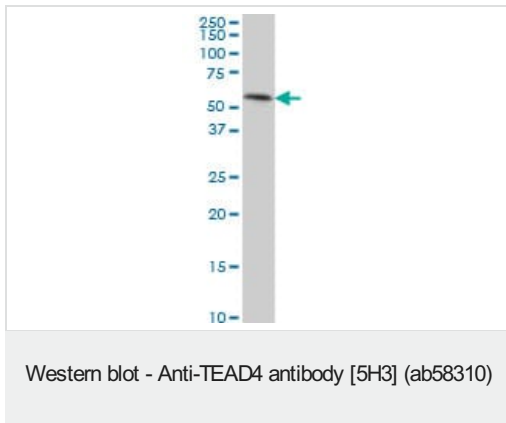
Performed under reducing conditions.

**Predicted band size:** 48 kDa

**Observed band size:** 48 kDa

False colour image of Western blot: Anti-TEAD4 antibody [5H3] staining at 1  $\mu$ g/ml, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] ([ab181602](#)) loading control staining at 1/20000 dilution, shown in red.

In Western blot, ab58310 was shown to bind specifically to TEAD4. A band was observed at 48 kDa in wild-type A549 cell lysates with no signal observed at this size in TEAD4 CRISPR-Cas9 edited cell line [ab277855](#). The band observed in the CRISPR-Cas9 edited lysate lane below 48 kDa is likely to represent a truncated form of TEAD4. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and TEAD4 CRISPR-Cas9 edited A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Mouse IgG H&L 800CW and Goat anti-Rabbit IgG H&L 680RD at 1/20000 dilution.



TEAD4 antibody (ab58310) at 1ug/lane + HeLa cell lysate at 25ug/lane.

This image was generated using the ascites version of the product.

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

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