


## Product datasheet

### Anti-TLE 1 antibody [EPR9386(2)] ab183742

KO VALIDATED Recombinant RabMAB

★★★★★ [1 Abreviews](#) [7 References](#) [9 Images](#)

#### Overview

<b>Product name</b>	Anti-TLE 1 antibody [EPR9386(2)]
<b>Description</b>	Rabbit monoclonal [EPR9386(2)] to TLE 1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: MCF7, HEK-293T, SH-SY5Y, HepG2, Jurkat and HeLa cell lysates. IHC-P: Human schwannoma and synovial sarcoma tissues. ICC/IF: MCF7 and HepG2 cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p>

#### Properties

<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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR9386(2)

Isotype IgG

## Applications

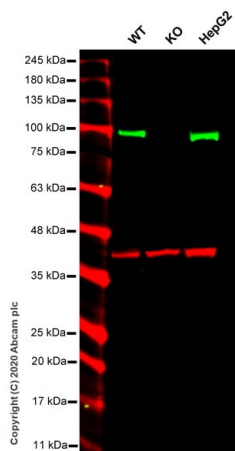
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab183742 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000 - 1/2000. Detects a band of approximately 83 kDa (predicted molecular weight: 83 kDa).

## Target

<b>Function</b>	Transcriptional corepressor that binds to a number of transcription factors. Inhibits NF-kappa-B-regulated gene expression. Inhibits the transcriptional activation mediated by FOXA2, and by CTNNB1 and TCF family members in Wnt signaling. The effects of full-length TLE family members may be modulated by association with dominant-negative AES. Unusual function as coactivator for ESRRG.
<b>Tissue specificity</b>	In all tissues examined, mostly in brain, liver and muscle.
<b>Sequence similarities</b>	Belongs to the WD repeat Groucho/TLE family. Contains 6 WD repeats.
<b>Domain</b>	WD repeat Groucho/TLE family members are characterized by 5 regions, a glutamine-rich Q domain, a glycine/proline-rich GP domain, a central CcN domain, containing a nuclear localization signal, and a serine/proline-rich SP domain. The most highly conserved are the N-terminal Q domain and the C-terminal WD-repeat domain.
<b>Post-translational modifications</b>	Phosphorylated, probably by CDK1. The degree of phosphorylation varies throughout the cell cycle, and is highest at the G2/M transition. Becomes hyperphosphorylated in response to cell differentiation and interaction with HES1 or RUNX1. Ubiquitinated by XIAP/BIRC4.
<b>Cellular localization</b>	Nucleus. Nuclear and chromatin-associated, depending on isoforms and phosphorylation status. Hyperphosphorylation decreases the affinity for nuclear components.

## Images



Western blot - Anti-TLE 1 antibody [EPR9386(2)] (ab183742)

**All lanes :** Anti-TLE 1 antibody [EPR9386(2)] (ab183742) at 1/1000 dilution

**Lane 1 :** Wild-type HEK-293T cell lysate

**Lane 2 :** TLE1 knockout HEK-293T cell lysate

**Lane 3 :** HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

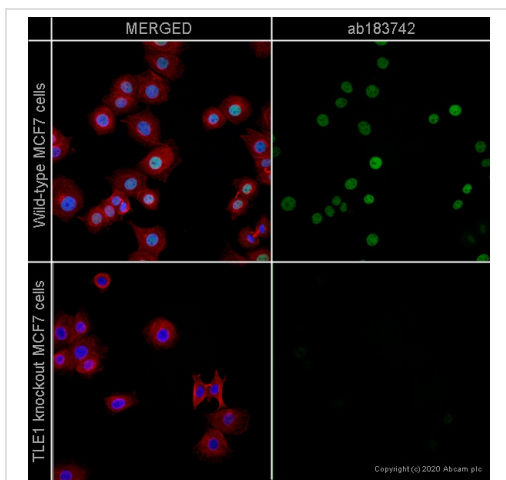
Performed under reducing conditions.

**Predicted band size:** 83 kDa

**Observed band size:** 83 kDa

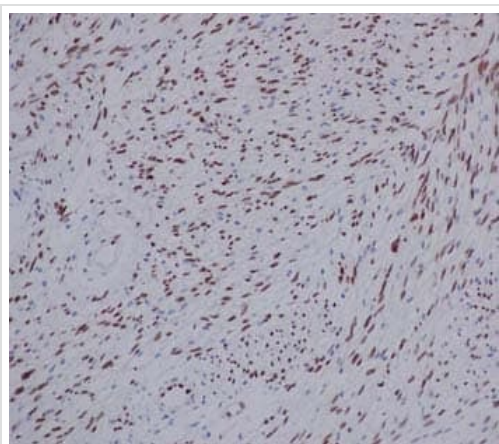
**Lanes 1-3:** Merged signal (red and green). Green - ab183742 observed at 83 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab183742 Anti-TLE 1 antibody [EPR9386(2)] was shown to specifically react with TLE 1 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab265059** (knockout cell lysate **ab257240**) was used. Wild-type and TLE 1 knockout samples were subjected to SDS-PAGE. ab183742 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.



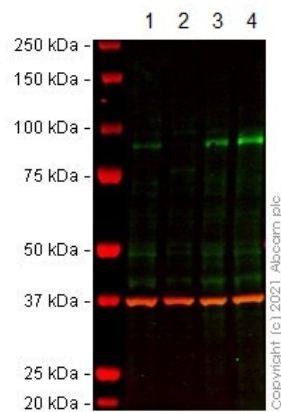
Immunocytochemistry/ Immunofluorescence - Anti-TLE 1 antibody [EPR9386(2)] (ab183742)

ab183742 staining TLE1 in wild-type MCF7 cells (top panel) and TLE1 knockout MCF7 cells (bottom panel). The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% 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 with ab183742 at 1/500 dilution and **ab7291** (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at 4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green) and a goat secondary antibody to mouse IgG (Alexa Fluor® 594) (**ab150120**) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI. Image was taken with a high-content analysis system (Perkin Elmer, Operetta CLS™).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLE 1 antibody [EPR9386(2)] (ab183742)

Immunohistochemical analysis of Human schwannoma, staining TLE 1 with ab183742 at 1/250 dilution. Detected using HRP Polymer for Rabbit IgG and counter-stained using hematoxylin. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-TLE 1 antibody [EPR9386(2)]  
(ab183742)

**All lanes** : Anti-TLE 1 antibody [EPR9386(2)] (ab183742) at 1/1000 dilution

**Lane 1** : Wild-type MCF7 cell lysate

**Lane 2** : TLE1 CRISPR/Cas9 edited MCF7 cell lysate

**Lane 3** : SH-SY5Y cell lysate

**Lane 4** : HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

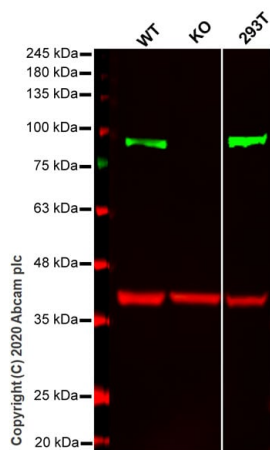
Performed under reducing conditions.

**Predicted band size:** 83 kDa

**Observed band size:** 83 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab183742 observed at 83 kDa. Red - loading control, **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab183742 was shown to react with TLE 1 in western blot. The band observed in the CRISPR/Cas9 edited lysate lane below 83 kDa is likely to represent a truncated form. This has not been investigated further. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween<sup>®</sup>) before incubation with ab183742 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-TLE 1 antibody [EPR9386(2)]  
(ab183742)

**All lanes** : Anti-TLE 1 antibody [EPR9386(2)] (ab183742) at 1/1000 dilution

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

**Lane 2** : TLE1 knockout HeLa cell lysate

**Lane 3** : 293T cell lysate

Lysates/proteins at 20 µg per lane.

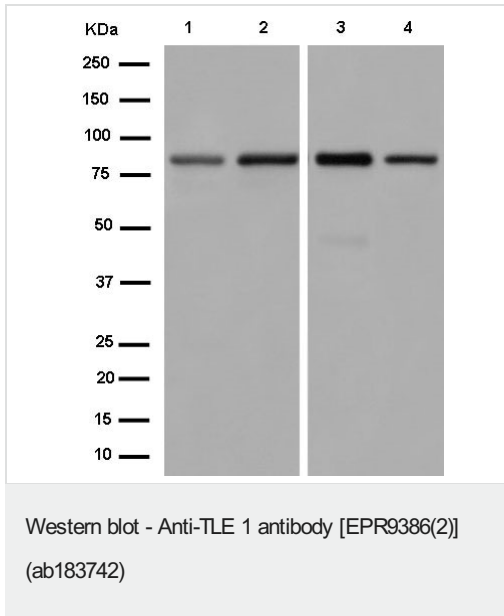
Performed under reducing conditions.

**Predicted band size:** 83 kDa

**Observed band size:** 83 kDa

**Lanes 1-3:** Merged signal (red and green). Green - ab183742 observed at 83 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab183742 Anti-TLE 1 antibody [EPR9386(2)] was shown to specifically react with TLE 1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab264901** (knockout cell lysate **ab257241**) was used. Wild-type and TLE 1 knockout samples were subjected to SDS-PAGE. ab183742 and Anti-GAPDH antibody [EPR16891] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-TLE 1 antibody [EPR9386(2)] (ab183742) at 1/1000 dilution

**Lane 1 :** SH-SY5Y cell lysate

**Lane 2 :** HepG2 cell lysate

**Lane 3 :** Jurkat cell lysate

**Lane 4 :** HeLa cell lysate

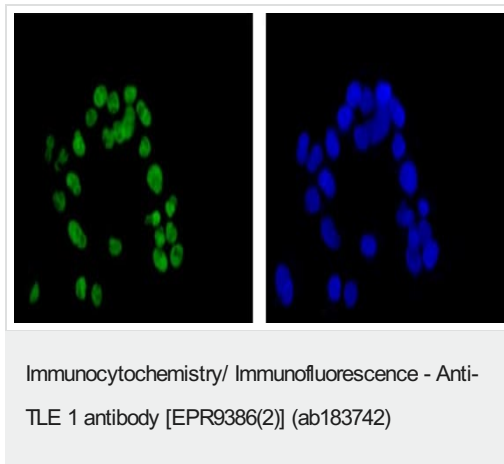
Lysates/proteins at 20 µg per lane.

**Secondary**

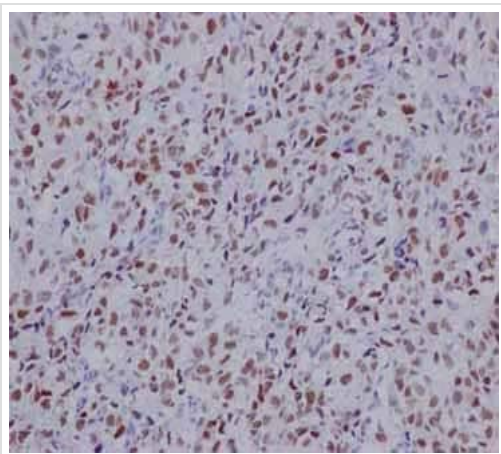
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 83 kDa

**Observed band size:** 83 kDa







Immunofluorescence analysis of paraformaldehyde-fixed HepG2 cells, staining TLE 1 (green) with ab183742 at 1/100 dilution. Alexa Fluor®488-conjugated goat anti rabbit IgG was used as a secondary antibody at 1/200 dilution. Nuclei were counterstained with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TLE 1 antibody [EPR9386(2)] (ab183742)

Immunohistochemical analysis of Human synovial sarcoma, staining TLE 1 with ab183742 at 1/250 dilution. Detected using HRP Polymer for Rabbit IgG and counter-stained using hematoxylin. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Why choose a recombinant antibody?

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

Anti-TLE 1 antibody [EPR9386(2)] (ab183742)

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