# abcam

# Product datasheet

# Anti-TLE 1 antibody [TLE1/2051] - BSA and Azide free ab237914

# 4 Images

#### Overview

Product name Anti-TLE 1 antibody [TLE1/2051] - BSA and Azide free

**Description** Mouse monoclonal [TLE1/2051] to TLE 1 - BSA and Azide free

Host species Mouse

**Tested applications** Suitable for: Protein Array, IHC-P, WB

Species reactivity Reacts with: Human

Predicted to work with: Mouse

**Immunogen** Recombinant fragment within Human TLE 1 aa 175-338. The exact sequence is proprietary.

Database link: Q04724

Positive control IHC-P: Human endometrial carcinoma tissue. WB: MCF7, HepG2, SH-SY5Y and HeLa whole cell

lysate.

**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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A/G purified

**Purification notes**Ab purified from Bioreactor Concentrate by Protein A/G.

**Clonality** Monoclonal

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Clone number TLE1/2051 Isotype lgG2a

Light chain type kappa

#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab237914 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
Protein Array		Use at an assay dependent concentration.
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Incubate with primary ab for 30 minutes at RT
WB		Use a concentration of 0.5 - 1 µg/ml. Predicted molecular weight: 83 kDa.

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**Function** 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.

Tissue specificity In all tissues examined, mostly in brain, liver and muscle.

Belongs to the WD repeat Groucho/TLE family. Sequence similarities

Contains 6 WD repeats.

**Domain** 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.

Post-translational

Phosphorylated, probably by CDK1. The degree of phosphorylation varies throughout the cell modifications cycle, and is highest at the G2/M transition. Becomes hyperphosphorylated in response to cell

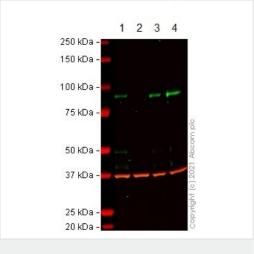
differentiation and interaction with HES1 or RUNX1.

Ubiquitinated by XIAP/BIRC4.

**Cellular localization** 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 [TLE1/2051] - BSA and Azide free (ab237914)

All lanes : Anti-TLE 1 antibody [TLE1/2051] ( $\underline{ab238063}$ ) at 0.5  $\mu g/ml$ 

Lane 1: Wild-type MCF7 cell lysate

Lane 2: TLE1 knockout 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.

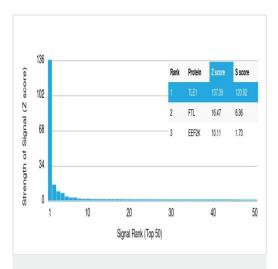
Predicted band size: 83 kDa Observed band size: 83 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab238063</u>).

This product was validated with an edited cell line that does not express the epitope recognised by this antibody. Testing with other antibodies has shown that the edited cell line produces a truncated protein.

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab238063</u> observed at 83 kDa. Red - loading control <u>ab181602</u> (Rabbit Anti-GAPDH antibody [EPR16891]) observed at 37 kDa.

ab238063 was shown to react with TLE 1 in wild-type MCF7 cells in Western blot with loss of signal observed in TLE1 knockout sample. Wild-type MCF7 and TLE1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween<sup>®</sup>) before incubation with ab238063 and ab181602 (Rabbit Anti-GAPDH antibody [EPR16891]) overnight at 4°C at 0.5 μg/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse lgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (ab216772) and Goat anti-Rabbit lgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



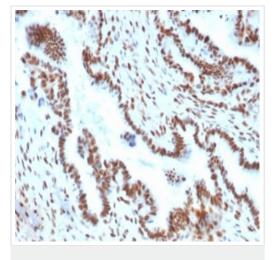
Protein Array - Anti-TLE 1 antibody [TLE1/2051] - BSA and Azide free (ab237914)

This data was produced with <u>ab238063</u>, the same antibody in a different formulation with BSA and Azide.

<u>ab238063</u> was tested in protein array against over 19000 different full-length human proteins.

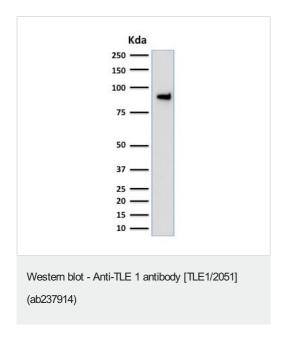
Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-lgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TLE 1 antibody
[TLE1/2051] (ab237914)

Formalin-fixed, paraffin-embedded human endometrial carcinoma tissue stained for TLE 1 using ab237914 at 2  $\mu$ g/mL in immunohistochemical analysis.



Anti-TLE 1 antibody [TLE1/2051] - BSA and Azide free (ab237914) at 1  $\mu$ g/ml + HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Predicted band size: 83 kDa

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

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