abcam

Product datasheet

Anti-TLE 1 antibody [TLE1/2062] ab238064

5 Images

Overview

Product name Anti-TLE 1 antibody [TLE1/2062]

Description Mouse monoclonal [TLE1/2062] to TLE 1

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 and GIST tissues. WB: MCF7, HepG2, SH-SY5Y and

HeLa whole cell lysate.

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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA

Purity Protein A/G purified

Purification notesAb purified from Bioreactor Concentrate by Protein A/G.

ClonalityMonoclonalClone numberTLE1/2062

1

lsotype lgG2a **Light chain type** kappa

Applications

The Abpromise guarantee

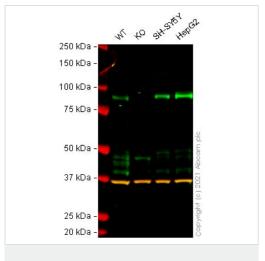
Our <u>Abpromise guarantee</u> covers the use of ab238064 in the following tested applications.

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 μ g/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.

Target		
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.	
Sequence similarities	Belongs to the WD repeat Groucho/TLE family. 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 modifications	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.	
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 [TLE1/2062] (ab238064)

All lanes : Anti-TLE 1 antibody [TLE1/2062] (ab238064) 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.

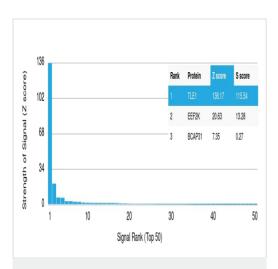
Performed under reducing conditions.

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

This 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 - ab238064 observed at 83 kDa. Red - loading control **ab181602** (Rabbit Anti-GAPDH antibody [EPR16891]) observed at 37 kDa.

ab238064 was shown to react with TLE 1 in MCF7 wild-type 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®) before incubation with ab238064 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® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit lgG H&L (IRDye® 680RD) preabsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.

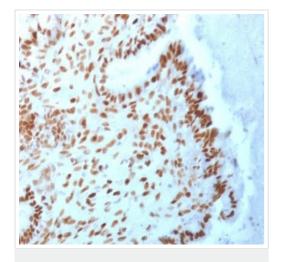


Protein Array - Anti-TLE 1 antibody [TLE1/2062] (ab238064)

ab238064 was tested in protein array against over 19000 different full-length human proteins.

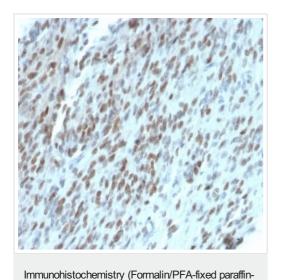
Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-lgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) 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
[TLE1/2062] (ab238064)

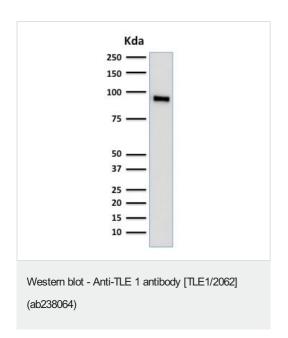
Formalin-fixed, paraffin-embedded human endometrial carcinoma tissue stained for TLE 1 using ab238064 at 2 μ g/mL in immunohistochemical analysis.



embedded sections) - Anti-TLE 1 antibody

[TLE1/2062] (ab238064)

Formalin-fixed, paraffin-embedded human GIST tissue stained for TLE 1 using ab238064 at 2 $\mu g/mL$ in immunohistochemical analysis.



Anti-TLE 1 antibody [TLE1/2062] (ab238064) at 1 μ 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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