abcam

Product datasheet

Anti-TEF1/TEAD-1 antibody [EPR3967(2)] ab133533

KO VALIDATED Recombinant RabMAb

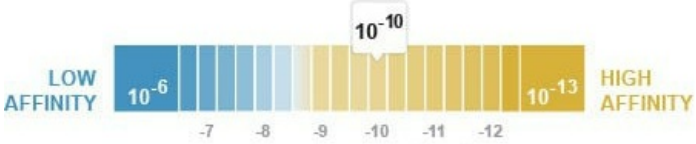
24 References 12 Images

Overview

Product name	Anti-TEF1/TEAD-1 antibody [EPR3967(2)]
Description	Rabbit monoclonal [EPR3967(2)] to TEF1/TEAD-1
Host species	Rabbit
Specificity	There is 71% homology between the antibody immunogen and the TEF5 protein. Preliminary ELISA data suggests weak cross-reactivity with TEF5, no cross-reactivity with TEF3 and TEF4.
Tested applications	**Suitable for:** WB, IHC-P, IP **Unsuitable for:** Flow Cyt or ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human TEF1/TEAD-1 aa 200-300. The exact sequence is proprietary.
Positive control	A549, HeLa, 293T, and fetal muscle lysates; Human placenta and skeletal muscle tissue. L6 (Rat skeletal muscle myoblast) and C2C12 whole cell lysates.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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. Stable for 12 months at -20°C.
Dissociation constant (K_D)	$K_D = 1.95 \times 10^{-10}$ M



Learn more about K_D

Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3967(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133533 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		1/1000 - 1/10000. Predicted molecular weight: 52 kDa.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. **For unpurified use at 1/100 - 1/250.** See **IHC antigen retrieval protocols**.
IP		1/10 - 1/100.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

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 cooperatively to the SPH and GT-IIC 'enhansons' (5'-GTGGAATGT-3') and activates transcription in vivo in a cell-specific manner. The activation function appears to be mediated by a limiting cell-specific transcriptional intermediary factor (TIF). Involved in cardiac development. Binds to the M-CAT motif.

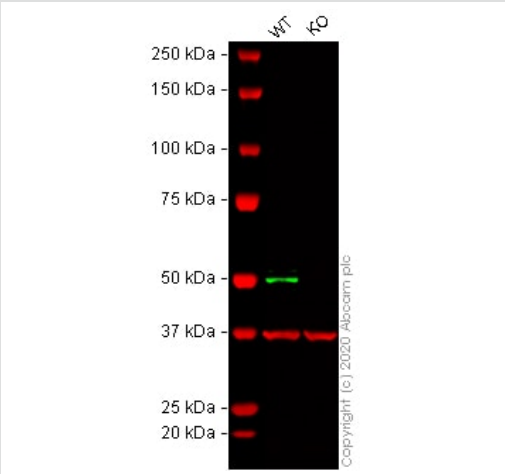
Tissue specificity Preferentially expressed in skeletal muscle. Lower levels in pancreas, placenta, and heart.

Involvement in disease Defects in TEAD1 are the cause of Sveinsson chorioretinal atrophy (SCRA) [MIM:108985]; also known as atrophia areata (AA) or helicoidal peripapillary chorioretinal degeneration (HPCD). SCRA is characterized by symmetrical lesions radiating from the optic disk involving the retina and the choroid.

Sequence similarities Contains 1 TEA DNA-binding domain.

Cellular localization Nucleus.

Images



Western blot - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

All lanes : Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533) at 1/1000 dilution

Lane 1 : Wild-type A549 cell lysate
Lane 2 : TEAD1 knockout A549 (Human lung carcinoma cell line) whole cell lysate

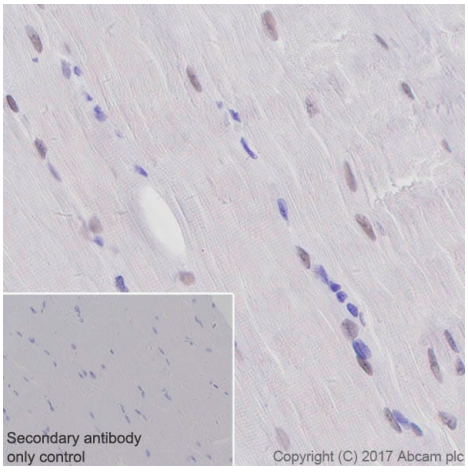
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 52 kDa
Observed band size: 50 kDa

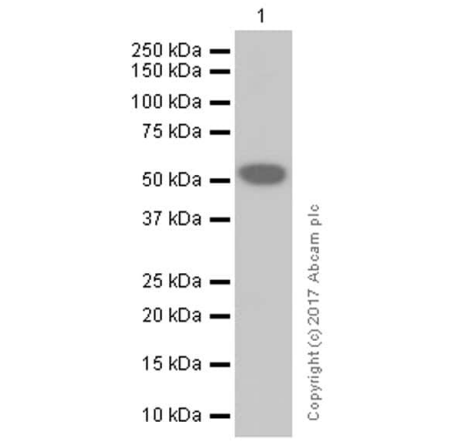
Lanes 1 - 2: Merged signal (red and green). Green - ab133533 observed at 50 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab133533 was shown to react with TEF1/TEAD-1 in wild-type A549 cells in western blot with loss of signal observed in TEAD1 knockout sample. Wild-type and TEAD1 knockout A549 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab133533 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® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human skeletal muscle tissue sections labeling TEF1/TEAD-1 with Purified ab133533 at 1:1000 dilution (1.63 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533) at 1/2000 dilution (purified) + Human fetal muscle lysates at 15 µg

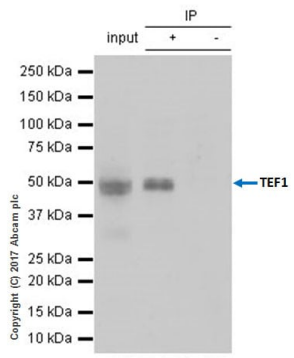
Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 52 kDa

Observed band size: 52 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Immunoprecipitation - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

ab133533 (purified) at 1:80 dilution (2ug) immunoprecipitating TEF1/TEAD-1 in 293 (Human embryonic kidney epithelial cell) whole cell lysate.

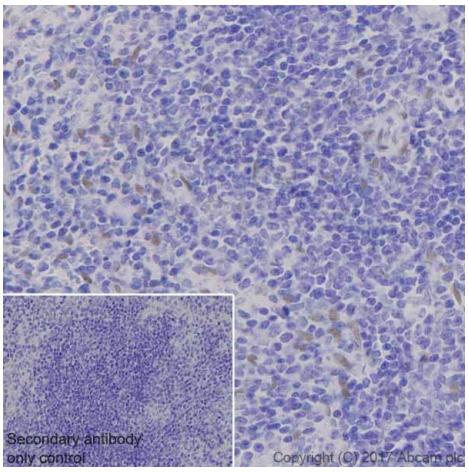
Lane 1 (input): 293 (Human embryonic kidney epithelial cell) whole cell lysate 10ug

Lane 2 (+): ab133533 & 293 (Human embryonic kidney epithelial cell) whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab133533 in 293 (Human embryonic kidney epithelial cell) whole cell lysate

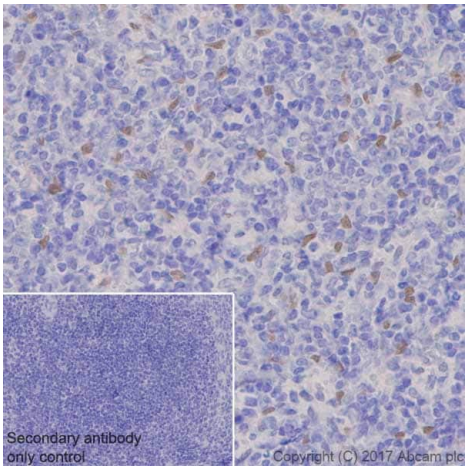
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



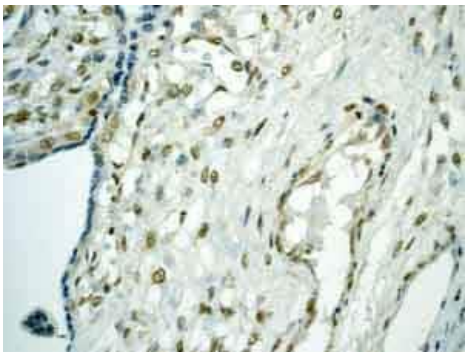
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse spleen tissue sections labeling TEF1/TEAD-1 with Purified ab133533 at 1:1000 dilution (1.63 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



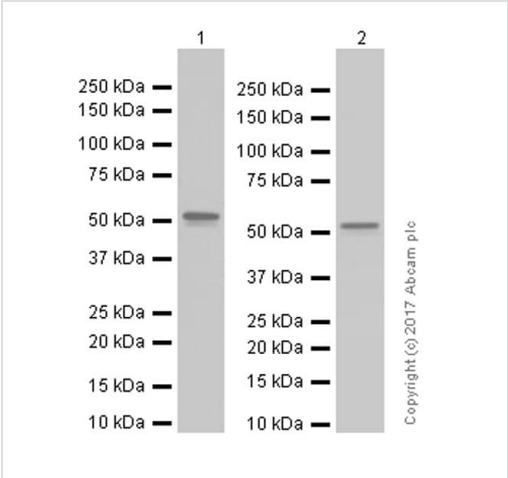
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat spleen tissue sections labeling TEF1/TEAD-1 with Purified ab133533 at 1:1000 dilution (1.63 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

Immunohistochemistry analysis of Paraffin Embedded Human placenta tissue labelling TEF1/TEAD-1 with unpurified ab133533 at 1/100. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

All lanes : Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533) at 1/10000 dilution (purified)

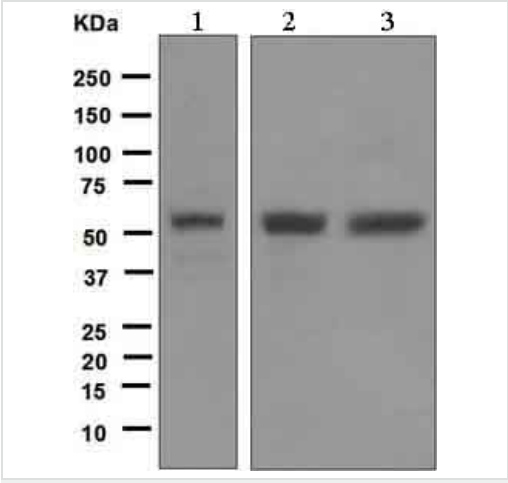
Lane 1 : L6 (Rat skeletal muscle myoblast) whole cell lysates
Lane 2 : C2C12 (Mouse myoblasts myoblast) whole cell lysate

Lysates/proteins at 15 µg per lane.

Secondary
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/2000 dilution

Predicted band size: 52 kDa
Observed band size: 52 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

All lanes : Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533) at 1/1000 dilution (unpurified)

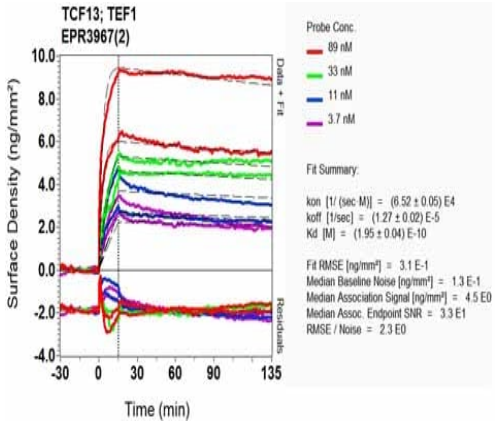
Lane 1 : HeLa cell lysate
Lane 2 : 293T cell lysate
Lane 3 : Fetal muscle lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 52 kDa

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

Immunohistochemistry analysis of Paraffin Embedded Human skeletal muscle tissue labelling TEF1/TEAD-1 with unpurified ab133533 at 1/100. Heat mediated antigen retrieval was performed using citrate buffer pH 6 before commencing with IHC staining protocol.

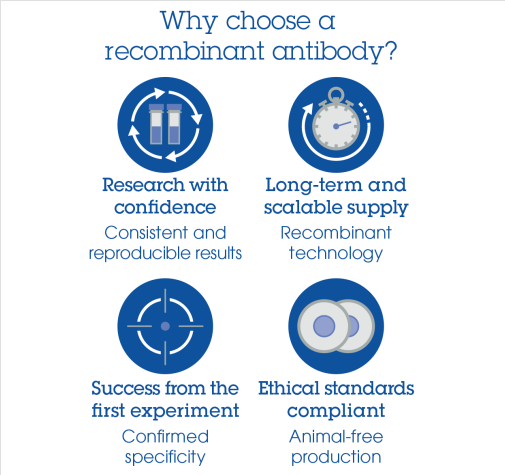


OI-RD Scanning - Anti-TEF1/TEAD-1 antibody [EPR3967(2)] (ab133533)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D



Anti-TEF1/TEAD-1 antibody [EPR3967(2)]

(ab133533)

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