abcam

Product datasheet

Anti-Zyxin antibody [ZOL301] ab50391

KO VALIDATED

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Overview

Product name	Anti-Zyxin antibody [ZOL301]
Description	Mouse monoclonal [ZOL301] to Zyxin
Host species	Mouse
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Cow
Immunogen	Synthetic peptide: PPQPREKVSSIDLEIDS conjugated to KLH by an N-terminal Cysteine residue linker, corresponding to amino acids 134-150 of Human Zyxin Run BLAST with Run BLAST with
Positive control	WB: HEK-293T, HeLa and Daudi cell lysates.
General notes	This product was changed from ascites to tissue culture supernatant on 17 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.

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: 0.0268% PBS
Purity	Tissue culture supernatant
Purification notes	Purified from TCS.
Clonality	Monoclonal
Clone number	ZOL301
Myeloma	NS1

Isotype	IgG2a

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab50391 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. Predicted molecular weight: 61 kDa.

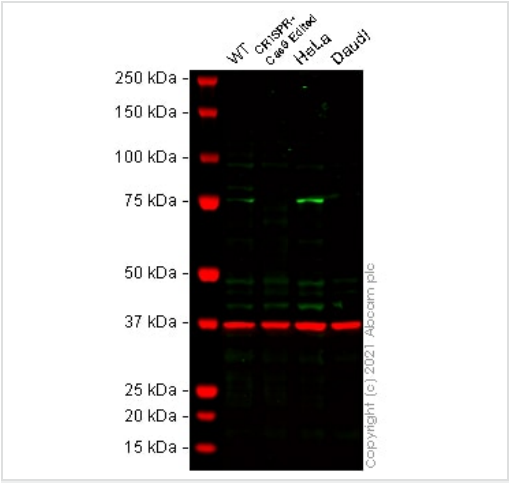
Target

Function Adhesion plaque protein. Binds alpha-actinin and the CRP protein. Important for targeting TES and ENA/VASP family members to focal adhesions and for the formation of actin-rich structures. May be a component of a signal transduction pathway that mediates adhesion-stimulated changes in gene expression.

Sequence similarities Belongs to the zyxin/ajuba family.
Contains 3 LIM zinc-binding domains.

Cellular localization Cytoplasm. Cytoplasm, cytoskeleton. Nucleus. Cell junction, focal adhesion. Associates with the actin cytoskeleton near the adhesion plaques. Enters the nucleus in the presence of HESX1.

Images



Western blot - Anti-Zyxin antibody [ZOL301] (ab50391)

All lanes : Anti-Zyxin antibody [ZOL301] (ab50391) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : ZYX CRISPR-Cas9 edited HEK-293T cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : Daudi cell lysate

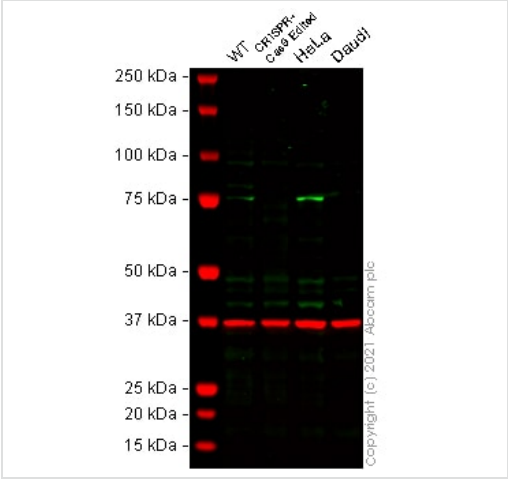
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 61 kDa
Observed band size: 75 kDa

False colour image of Western blot: Anti-Zyxin antibody [ZOL301] staining at 1/1000 dilution, shown in green; Rabbit Anti-GAPDH

antibody [EPR16891] (**ab181602**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab50391 was shown to bind specifically to Zyxin. A band was observed at 75 kDa in wild-type HEK-293T cell lysates with no signal observed at this size in ZYX CRISPR-Cas9 edited cell line **ab266503** (CRISPR-Cas9 edited cell lysate **ab257809**). The band observed in the CRISPR-Cas9 edited lysate lane below 75 kDa is likely to represent a truncated form of Zyxin. 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 ZYX CRISPR-Cas9 edited HEK-293T 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 (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) at 1/20000 dilution.



Western blot - Anti-Zyxin antibody [ZOL301] (ab50391)

All lanes : Anti-Zyxin antibody [ZOL301] (ab50391) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : ZYX CRISPR-Cas9 edited HEK-293T cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : Daudi cell lysate

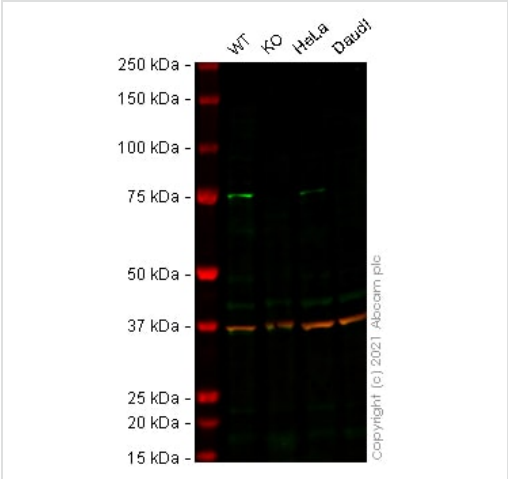
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 61 kDa
Observed band size: 75 kDa

False colour image of Western blot: Anti-Zyxin antibody [ZOL301] staining at 1/1000 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (**ab181602**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab50391 was shown to bind specifically to Zyxin. A band was observed at 75 kDa in wild-type HEK-293T cell lysates with no signal observed at this

size in ZYX CRISPR-Cas9 edited cell line **ab266503** (CRISPR-Cas9 edited cell lysate **ab257809**). The band observed in the CRISPR-Cas9 edited lysate lane below 75 kDa is likely to represent a truncated form of Zyxin. 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 ZYX CRISPR-Cas9 edited HEK-293T 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 (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) at 1/20000 dilution.



Western blot - Anti-Zyxin antibody [ZOL301] (ab50391)

All lanes : Anti-Zyxin antibody [ZOL301] (ab50391) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : ZYX knockout HEK-293T cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : Daudi cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 61 kDa
Observed band size: 75 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab50391 observed at 75 kDa. Red - loading control **ab181602** (Rabbit Anti-GAPDH antibody [EPR16891]) observed at 37 kDa.

ab50391 was shown to react with ZYX in wild-type HEK-293T cells in Western blot with loss of signal observed in ZYX knockout cell line **ab266504** (ZYX knockout cell lysate **ab257810**). Wild-type HEK-293T and ZYX knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab50391 and **ab181602** (Rabbit Anti-GAPDH antibody [EPR16891]) overnight at 4 °C at a 1 in 1000

dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.

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