

Product datasheet

Anti-Transglutaminase 2 antibody [EP2957] ab109200

KO VALIDATED Recombinant RabMAB

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Overview

Product name	Anti-Transglutaminase 2 antibody [EP2957]
Description	Rabbit monoclonal [EP2957] to Transglutaminase 2
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: U87-MG, A549, HeLa and HUVEC cell lysates. IHC-P: Human kidney tissue. IHC-Fr: Mouse kidney and heart tissue.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP2957
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab109200 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

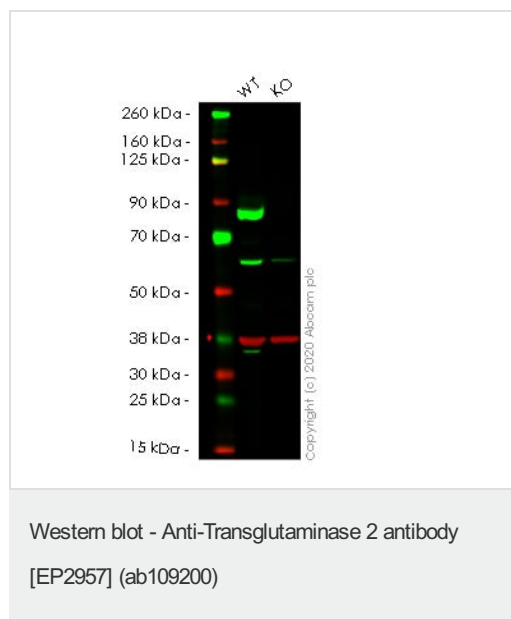
Application	Abreviews	Notes
WB		1/10000 - 1/50000. Predicted molecular weight: 77 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function Catalyzes the cross-linking of proteins and the conjugation of polyamines to proteins.

Sequence similarities Belongs to the transglutaminase superfamily. Transglutaminase family.

Images



All lanes : Anti-Transglutaminase 2 antibody [EP2957] (ab109200) at 1/10000 dilution

Lane 1 : Wild-type A549 cell lysate

Lane 2 : TGM2 Knockout A549 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

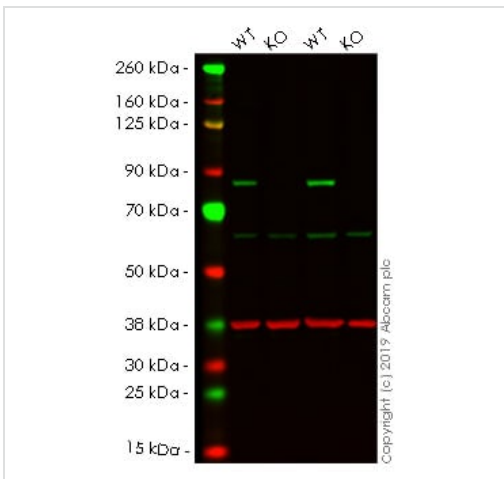
Predicted band size: 77 kDa

Observed band size: 77 kDa

Lanes 1-2: Merged signal (red and green). Green - ab109200

observed at 77 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab109200](#) Anti-Transglutaminase 2 antibody [EP2957] was shown to specifically react with Transglutaminase 2 in wild-type A549 cells. Loss of signal was observed when knockout cell line [ab267110](#) (knockout cell lysate [ab257087](#)) was used. Wild-type and Transglutaminase 2 knockout samples were subjected to SDS-PAGE. [ab109200](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 10000 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 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Transglutaminase 2 antibody [EP2957] ([ab109200](#))

All lanes : Anti-Transglutaminase 2 antibody [EP2957] ([ab109200](#)) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : TGM2 knockout HeLa cell lysate

Lane 3 : Wild-type A549 cell lysate

Lane 4 : TGM2 knockout A549 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

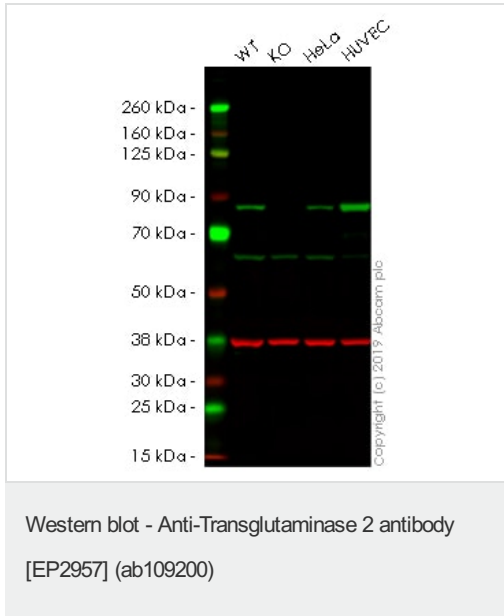
Predicted band size: 77 kDa

Observed band size: 77 kDa

Lanes 1-4: Merged signal (red and green). Green - [ab109200](#) observed at 77 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab109200](#) Anti-Transglutaminase 2 antibody [EP2957] was shown to specifically react with Transglutaminase 2 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265245](#) (knockout cell lysate [ab257085](#)) was used. Wild-type and Transglutaminase 2 knockout samples were subjected to SDS-PAGE. [ab109200](#) and Anti-alpha Tubulin antibody [EP1332Y] - Microtubule Marker ([ab52866](#)) 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 20000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-Transglutaminase 2 antibody [EP2957] (ab109200) at 1/1000 dilution

Lane 1 : Wild-type A549 whole cell lysate

Lane 2 : TGM2 knockout A549 whole cell lysate

Lane 3 : HeLa whole cell lysate

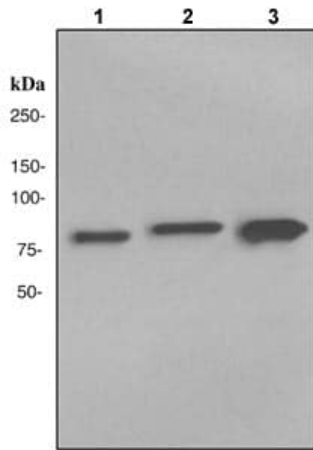
Lane 4 : HUVEC whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 77 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab109200 observed at 77 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab109200 was shown to recognize TGM2 in wild-type A549 cells as signal was lost at the expected MW in TGM2 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and TGM2 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab109200 and [ab8245](#) (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed 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 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Transglutaminase 2 antibody [EP2957] (ab109200)

All lanes : Anti-Transglutaminase 2 antibody [EP2957] (ab109200) at 1/10000 dilution

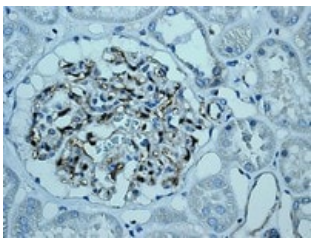
Lane 1 : U87-MG cell lysate

Lane 2 : A549 cell lysate

Lane 3 : HUVEC cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 77 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Transglutaminase 2 antibody [EP2957] (ab109200)

ab109200, at 1/100 dilution, staining Transglutaminase 2 in paraffin-embedded Human kidney tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Transglutaminase 2 antibody [EP2957]

(ab109200)

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

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