abcam

Product datasheet

Anti-Transglutaminase 2 antibody [EP2957] ab109200

KO VALIDATED Recombinant RabMAb

1 Abreviews 11 References 6 Images

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	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**. Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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.

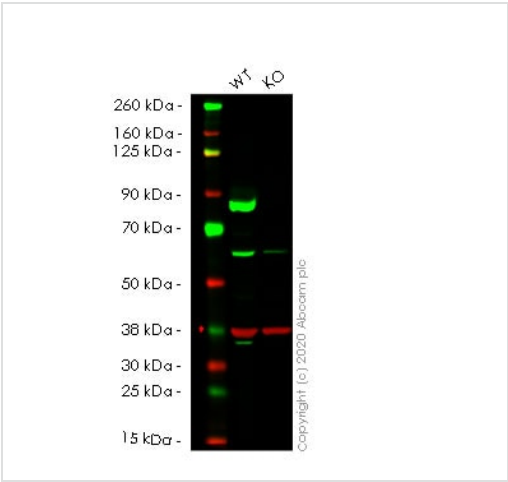
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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



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

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.

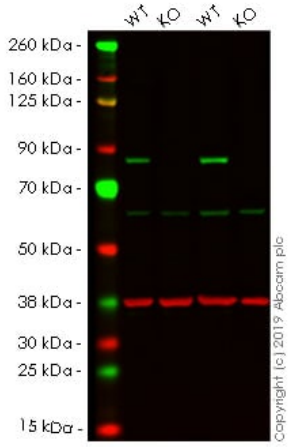
Performed under reducing conditions.

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

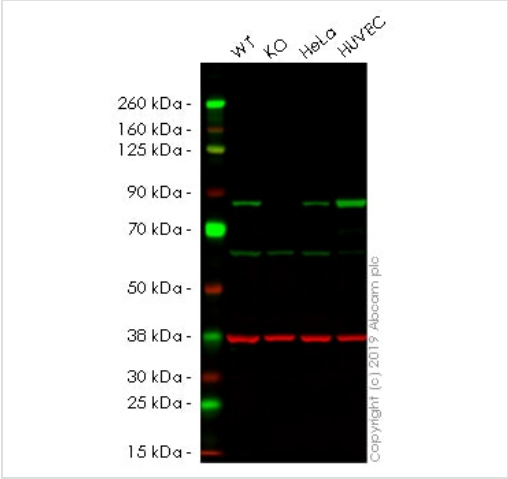
Lysates/proteins at 20 µg per lane.

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.



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

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

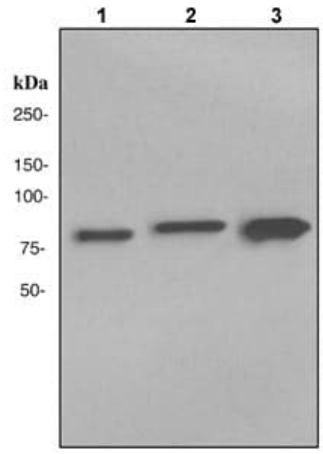
Lane 1 : Wild-type A549 whole cell lysate
Lane 2 : TGM2 knockout A549 whole cell lysate
Lane 3 : HeLa whole cell lysate
Lane 4 : HUVEC whole cell lysate

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.



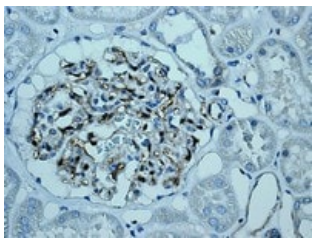
Western blot - Anti-Transglutaminase 2 antibody [EP2957] (ab109200)

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.

Anti-Transglutaminase 2 antibody [EP2957] (ab109200)

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors