


## Product datasheet

### Anti-Transglutaminase 2 antibody [CUB 7402] ab2386

KO VALIDATED

★★★★★ [9 Abreviews](#) [34 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-Transglutaminase 2 antibody [CUB 7402]
<b>Description</b>	Mouse monoclonal [CUB 7402] to Transglutaminase 2
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB, ICC/IF, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rabbit, Guinea pig, Cat, Dog, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Full length native protein (purified) corresponding to Transglutaminase 2. Purified from liver. Database link: <a href="#">P08587</a>
<b>Epitope</b>	Epitope mapping for this antibody is amino acid 447-478
<b>Positive control</b>	IHC-P: Human breast carcinoma tissue. WB: A549 whole cell lysate; HeLa whole cell lysate; Huvec whole cell lysate
<b>General notes</b>	<p>The 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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.3 Preservative: 0.05% Sodium azide Constituent: 1% BSA
<b>Purity</b>	IgG fraction
<b>Clonality</b>	Monoclonal

Clone number	CUB 7402
Myeloma	unknown
Isotype	IgG1
Light chain type	unknown

## Applications

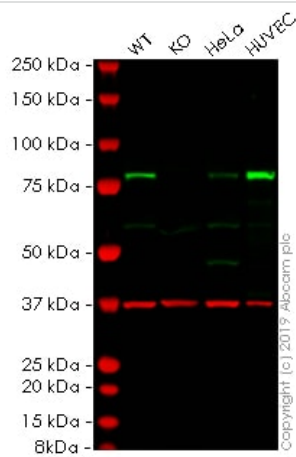
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab2386 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (3)	1/50 - 1/75. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 77 kDa (predicted molecular weight: 77 kDa).
ICC/IF	★★★★★ (2)	Use at an assay dependent concentration. PubMed: 19398782
Flow Cyt	★★★★★ (1)	1/10. Methanol fixed cells. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

<b>Function</b>	Catalyzes the cross-linking of proteins and the conjugation of polyamines to proteins.
<b>Sequence similarities</b>	Belongs to the transglutaminase superfamily. Transglutaminase family.

## Images



Western blot - Anti-Transglutaminase 2 antibody  
[CUB 7402] (ab2386)

**All lanes :** Anti-Transglutaminase 2 antibody [CUB 7402] (ab2386)  
at 1 µg/ml

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

**Lane 2 :** TGM2 knockout A549 (Human lung carcinoma cell line)  
whole cell lysate

**Lane 3 :** HeLa (Human epithelial cell line from cervix  
adenocarcinoma) whole cell lysate

**Lane 4 :** HUVEC (Human umbilical vein endothelial cell line) whole  
cell lysate

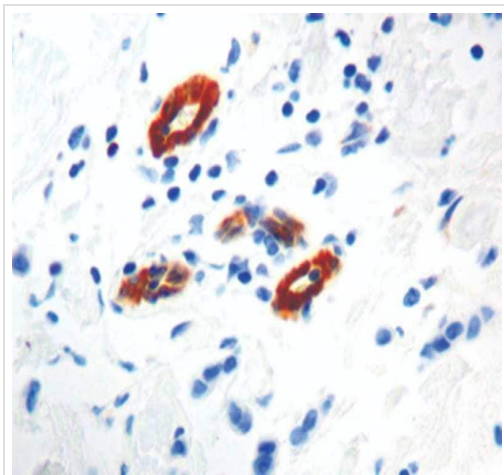
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 77 kDa

**Observed band size:** 77 kDa

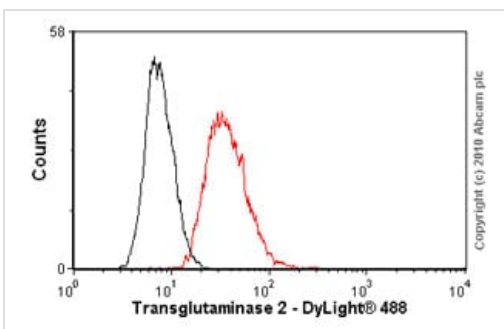
**Lanes 1 - 4:** Merged signal (red and green). Green - ab2386  
observed at 77 kDa. Red - loading control, **ab181602**, observed at  
37 kDa.

ab2386 was shown to recognize 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. Ab2386  
and **ab181602** (Rabbit anti-GAPDH loading control) were  
incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution  
respectively. Blots were developed 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 1/20000 dilution for 1 hour at room temperature  
before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Transglutaminase 2 antibody [CUB 7402] (ab2386)

Immunohistochemical analysis of human breast carcinoma tissue labeling Transglutaminase 2 with ab2386. Tissue was fixed with paraformaldehyde; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/50) for 30 minutes at 22°C.



Flow Cytometry - Anti-Transglutaminase 2 antibody [CUB 7402] (ab2386)

Overlay histogram showing HCT116 cells stained with ab2386 (red line). The cells were fixed with methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab2386, 1/10 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a decreased signal in HCT116 cells fixed with 4% paraformaldehyde (10 min) used under the same conditions.

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

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