


## Product datasheet

### Anti-TORC2 antibody [EPR3384(2)] ab109081

Recombinant **RabMAb**

★★★★★ [4 Abreviews](#) [7 References](#) [4 Images](#)

#### Overview

<b>Product name</b>	Anti-TORC2 antibody [EPR3384(2)]
<b>Description</b>	Rabbit monoclonal [EPR3384(2)] to TORC2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	293T, Raji, and A673 cell lysates; Human tonsil tissue.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3384(2)

**Isotype** IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab109081 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	★★★★★ (3)	1/1000 - 1/10000. Predicted molecular weight: 73 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.

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

## Target

**Function** Transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. Acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. Enhances the interaction of CREB1 with TAF4. Regulates gluconeogenesis as a component of the LKB1/AMPK/TORC2 signaling pathway. Regulates the expression of specific genes such as the steroidogenic gene, StAR. Potent coactivator of PPARGC1A and inducer of mitochondrial biogenesis in muscle cells. Also coactivator for TAX activation of the human T-cell leukemia virus type 1 (HTLV-1) long terminal repeats (LTR).

**Tissue specificity** Most abundantly expressed in the thymus. Present in both B and T lymphocytes. Highly expressed in HEK293T cells and in insulinomas. High levels also in spleen, ovary, muscle and lung, with highest levels in muscle. Lower levels found in brain, colon, heart, kidney, prostate, small intestine and stomach. Weak expression in liver and pancreas.

**Sequence similarities** Belongs to the TORC family.

**Post-translational modifications** Phosphorylation/dephosphorylation states of Ser-171 are required for regulating transduction of CREB activity. TORCs are inactive when phosphorylated, and active when dephosphorylated at this site. This primary site of phosphorylation, is regulated by cAMP and calcium levels and is dependent on the phosphorylation of SIKs by LKB1. Both insulin and AMPK increase this phosphorylation, of TORC2 while glucagon suppresses it.

**Cellular localization** Cytoplasm. Nucleus. Translocated from the nucleus to the cytoplasm on interaction of the phosphorylated form with 14-3-3 protein. In response to cAMP levels and glucagon, relocated to the nucleus.

## Images

100 —  
75 —  
63 —



2013 Abcam

Western blot - Anti-TORC2 antibody [EPR3384(2)] (ab109081)

This image is courtesy of an Abreview submitted by Javier Triñanes

Anti-TORC2 antibody [EPR3384(2)] (ab109081) at 1/5000 dilution  
+ Ins-1, rat insulinoma cell line, nuclear cell lysate at 1200000 cells

### Secondary

HRP-conjugated Goat anti-rabbit IgG polyclonal at 1/10000 dilution

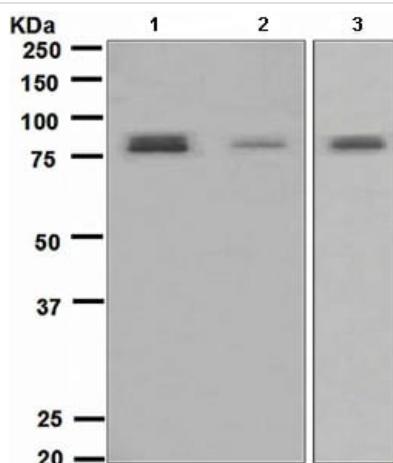
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 73 kDa

**Observed band size:** 75 kDa

**Exposure time:** 5 minutes



Western blot - Anti-TORC2 antibody [EPR3384(2)] (ab109081)

**All lanes :** Anti-TORC2 antibody [EPR3384(2)] (ab109081) at 1/1000 dilution

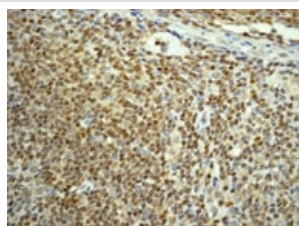
**Lane 1 :** 293T cell lysate

**Lane 2 :** Raji cell lysate

**Lane 3 :** A673 cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 73 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TORC2 antibody [EPR3384(2)] (ab109081)

ab109081 at 1/100 dilution staining Torc2 in Human tonsil by Immunohistochemistry, Paraffin-embedded tissue.

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-TORC2 antibody [EPR3384(2)] (ab109081)

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

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