

## Product datasheet

### Anti-TORC2 antibody [EPR20219] ab184239

Recombinant RabMAb

4 Images

#### Overview

<b>Product name</b>	Anti-TORC2 antibody [EPR20219]
<b>Description</b>	Rabbit monoclonal [EPR20219] to TORC2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: A20, CTLL-2, YAC-1, Neuro-2a, C6, L6, A-673, Jurkat, Raji, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; Human fetal heart, fetal kidney and fetal brain lysates; Mouse and rat brain, kidney and spleen lysates.
<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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR20219

**Isotype** IgG

## Applications

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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab184239 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. Detects a band of approximately 78 kDa (predicted molecular weight: 73 kDa).

## Target

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**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.

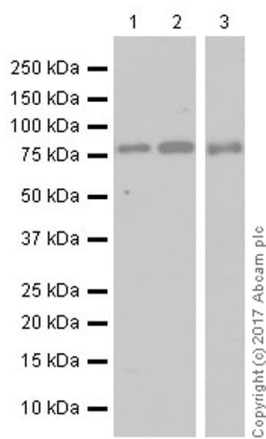
**Sequence similarities** Belongs to the TORC family.

**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

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Western blot - Anti-TORC2 antibody [EPR20219] (ab184239)

**All lanes** : Anti-TORC2 antibody [EPR20219] (ab184239) at 1/1000 dilution

**Lane 1** : Human fetal heart tissue lysate

**Lane 2** : Human fetal kidney tissue lysate

**Lane 3** : Human fetal brain tissue lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes** : VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/10000 dilution

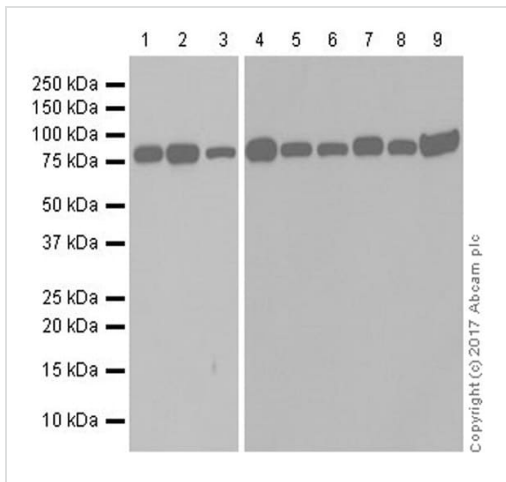
Developed using the ECL technique.

**Predicted band size:** 73 kDa

**Observed band size:** 78 kDa

**Exposure times:** Lanes 1, 2: 3 minutes; Lane 3: 15 seconds.

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-TORC2 antibody [EPR20219] (ab184239)

**All lanes :** Anti-TORC2 antibody [EPR20219] (ab184239) at 1/1000 dilution

**Lane 1 :** A20 (mouse reticulum sarcoma cell line) whole cell lysate

**Lane 2 :** CTLL-2 (mouse T lymphocyte cell line) whole cell lysate

**Lane 3 :** YAC-1 (mouse Moloney murine leukemia virus induced lymphoma lymphoblast cell line) whole cell lysate

**Lane 4 :** Neuro-2a (mouse neuroblastoma cell line) whole cell lysate

**Lane 5 :** C6 (rat glial tumor cell line) whole cell lysate

**Lane 6 :** L6 (rat skeletal muscle cell line) whole cell lysate

**Lane 7 :** A-673 (human muscle Ewing's Sarcoma cell line) whole cell lysate

**Lane 8 :** Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 9 :** Raji (human Burkitt's lymphoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

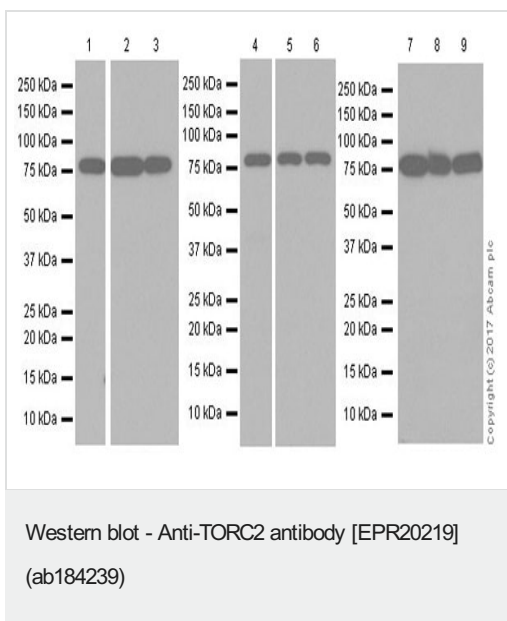
Developed using the ECL technique.

**Predicted band size:** 73 kDa

**Observed band size:** 78 kDa

**Exposure times:** Lanes 1-3: 10 seconds; Lanes 4-9: 3 minutes.

Blocking/Dilution buffer: 5% NFDm/TBST.



**All lanes** : Anti-TORC2 antibody [EPR20219] (ab184239) at 1/1000 dilution

**Lane 1** : Mouse brain lysate at 10  $\mu$ g

**Lane 2** : Mouse kidney lysate at 10  $\mu$ g

**Lane 3** : Mouse spleen lysate at 10  $\mu$ g

**Lane 4** : Rat brain lysate at 10  $\mu$ g

**Lane 5** : Rat kidney lysate at 10  $\mu$ g

**Lane 6** : Rat spleen lysate at 10  $\mu$ g

**Lane 7** : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate at 20  $\mu$ g

**Lane 8** : PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate at 20  $\mu$ g

**Lane 9** : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate at 20  $\mu$ g

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Developed using the ECL technique.


**Predicted band size:** 73 kDa

**Observed band size:** 78 kDa

**Exposure times:** Lanes 1-6: 3 minutes; Lanes 7-9: 15 seconds.

Blocking/Dilution buffer: 5% NFDm/TBST.

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 [EPR20219] (ab184239)

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

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- Response to your inquiry within 24 hours
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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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