# abcam

## Product datasheet

## Anti-TORC1 antibody [EPR3382] ab92477

יולצעבע RabMAb

3 References 画像数3

#### 製品の概要

製品名 Anti-TORC1 antibody [EPR3382]

製品の詳細 Rabbit monoclonal [EPR3382] to TORC1

由来種 Rabbit

アプリケーション 適用あり: WB, Flow Cyt (Intra)

適用なし: IHC-P or IP

種交差性 交差種: Rat. Human

交差が予測される動物種: Mouse 🔷

免疫原 Synthetic peptide within Human TORC1. The exact sequence is proprietary.

ポジティブ・コントロール Fetal brain and C6 cell lysates

特記事項 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**.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Tissue culture supernatant

ポリ/モノ モノクローナル クローン名 EPR3382

アイソタイプ

ΙgG

#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab92477の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000 - 1/5000. Detects a band of approximately 78 kDa (predicted molecular weight: 67 kDa).
Flow Cyt (Intra)		1/1000 - 1/10000.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

追加情報

Is unsuitable for IHC-P or IP.

#### ターゲット情報

#### 機能

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 the expression of specific CREB-activated genes such as the steroidogenic gene, StAR. Potent coactivator of PGC1alpha 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). In the hippocampus, involved in late-phase long-term potentiation (L-LTP) maintenance at the Schaffer collateral-CA1 synapses. May be required for dendritic growth of developing cortical neurons (By similarity). In concert with SIK1, regulates the light-induced entrainment of the circadian clock. In response to light stimulus, coactivates the CREB-mediated transcription of PER1 which plays an important role in the photic entrainment of the circadian clock.

#### 組織特異性

Highly expressed in adult and fetal brain. Located to specific regions such as the prefrontal cortex and cerebellum. Very low expression in other tissues such as heart, spleen, lung, skeletal muscle, salivary gland, ovary and kidney.

#### 関連疾患

A chromosomal aberration involving CRTC1 is found in mucoepidermoid carcinomas, benign Warthin tumors and clear cell hidradenomas. Translocation t(11;19)(q21;p13) with MAML2. The fusion protein consists of the N-terminus of CRTC1 joined to the C-terminus of MAML2. The reciprocal fusion protein consisting of the N-terminus of MAML2 joined to the C-terminus of CRTC1 has been detected in a small number of mucoepidermoid carcinomas.

#### 配列類似性

Belongs to the TORC family.

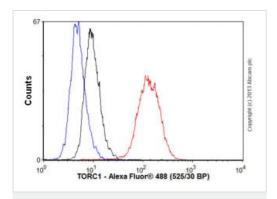
#### 翻訳後修飾

Phosphorylation/dephosphorylation states of Ser-151 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 mediated by SIKs (SIK1 and SIK2), is regulated by cAMP and calcium levels and is dependent on the phosphorylation of SIKs by LKB1.

## 細胞内局在

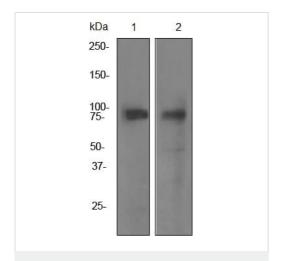
Cytoplasm. Nucleus. Cytoplasmic when phosphorylated by SIK or AMPK and when sequestered by 14-3-3 proteins (PubMed:16817901). Translocated to the nucleus on Ser-151 dephosphorylation, instigated by a number of factors including calcium ion and cAMP levels

#### 画像



Flow Cytometry (Intracellular) - Anti-TORC1 antibody [EPR3382] (ab92477)

Overlay histogram showing SHSY-5Y cells stained with ab92477 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab92477, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor<sup>®</sup> 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in SHSY-5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Western blot - Anti-TORC1 antibody [EPR3382] (ab92477)

**All lanes :** Anti-TORC1 antibody [EPR3382] (ab92477) at 1/1000 dilution

Lane 1 : Fetal brain lysate

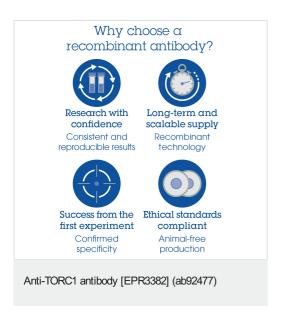
Lane 2 : C6 cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: HRP labelled goat anti-rabbit antibody at 1/2000 dilution

**Predicted band size:** 67 kDa **Observed band size:** 78 kDa



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