

## Rabbit Anti-Phospho-Torc1 (Ser151)/AF350 Conjugated antibody

SL3453R-AF350

<b>Product Name</b>	Anti-Phospho-Torc1 (Ser151)/AF350
<b>Chinese Name</b>	AF350 标记的磷酸化 CREB 转录共激
<b>Alias</b>	Phospho-Torc1/Crtc1 (Ser151); Phospho-Torc1(Ser151); P-Torc1 (Ser151); Crtc1 (Ser151); Crtc1 (Phospho S151); CREB regulated transcription coactivator 1; CRTC1; KIAA0616; MECT 1; Mucoepidermoid carcinoma translocated protein 1; also known as MucoEpidermoid Carcinoma Translocated 1; TORC1; Transducer of CREB protein 1; Transducer of regulated cAMP response element binding protein 1; WAMTP1; MECT1; TORC1; TORC-1; WAMTP1; CRTC1_HUMAN.
<b>Product Type</b>	Phosphorylated anti
<b>Research Area</b>	Tumour immunology Neurobiology Signal transduction transcriptional regulatory factor Kinases and Phosphatases
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	Human(predicted:Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit)
<b>Applications</b>	Flow-Cyt=1µg /Test,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	70kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated Synthesised phosphopeptide derived from human Torc1 around the phosphorylation site of Ser151
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH

7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**background:**

which activates transcription through both consensus and variant cAMP response element (CRE) sites. MECT1 does not appear to modulate CREB1 DNA-binding activity but enhances the interaction of CREB1 with TAF4/TAFII-130. MECT1 translocates with MAML2 (MasterMind-Like Protein 2) to yield a fusion oncogene: t(11;19) (q21;p13). This translocation occurs in mucoepidermoid carcinomas, benign Warthin tumors and clear cell hidradenomas. The novel fusion product that results disrupts the Notch signaling pathway. The fusion protein consists of the N-terminus of MECT1 joined to the C-terminus of MAML2. The reciprocal fusion protein consisting of the N-terminus of MAML2 joined to the C-terminus of MECT1 has been detected in a small number of mucoepidermoid carcinomas. Multiple isoforms have been reported for the MECT1 protein.

**Subunit:**

Binds, as a tetramer, through its N-terminal region, with the bZIP domain of CREB1. 'Arg-314' in the bZIP domain of CREB1 is essential for this interaction. Interaction, via its C-terminal, with TAF4, enhances recruitment of TAF4 to CREB1. Binds HTLV1 Tax.

**Product Detail**

**Subcellular Location:**

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

**Tissue Specificity:**

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.

**Post-translational modifications:**

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 (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR

**DISEASE:**

Note=A chromosomal aberration involving CRTCl 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.

**Similarity:**

Belongs to the TORC family.

**Database links:**

[Entrez Gene: 23373](#)?/span>Human

[Entrez Gene: 382056](#)?/span>Mouse

[Entrez Gene: 684527](#)?/span>Rat

[Omim: 607536](#)?/span>Human

[SwissProt: Q6UUV9](#)?/span>Human

[SwissProt: Q68ED7](#)?/span>Mouse

[SwissProt: Q157S1](#)?/span>Rat

[Unigene: 371096](#)?/span>Human

[Unigene: 428214](#)?/span>Human

[Unigene: 227767](#)?/span>Mouse

[Unigene: 208248](#)?/span>Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.