

CRTC2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14321a

Specification

CRTC2 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	<u>O53ET0</u>
Other Accession	<u>NP_859066.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	73302
Aptigen Region	94-123
Antigen Region	94-123

CRTC2 Antibody (N-term) - Additional Information

Gene ID 200186

Other Names

CREB-regulated transcription coactivator 2, Transducer of regulated cAMP response element-binding protein 2, TORC-2, Transducer of CREB protein 2, CRTC2, TORC2

Target/Specificity

This CRTC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 94-123 amino acids from the N-terminal region of human CRTC2.

Dilution WB~~1:1000 IHC-P~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CRTC2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CRTC2 Antibody (N-term) - Protein Information

Name CRTC2



Synonyms TORC2

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).

Cellular Location

Cytoplasm. Nucleus. Note=Translocated from the nucleus to the cytoplasm on interaction of the phosphorylated form with 14-3-3 protein (PubMed:15454081). In response to cAMP levels and glucagon, relocated to the nucleus (PubMed:15454081)

Tissue Location

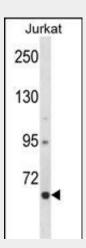
Most abundantly expressed in the thymus. Present in both B and T-lymphocytes. Highly expressed in HEK293T cells and in insulinomas. High levels also in spleen, ovary, muscle and lung, with highest levels in muscle. Lower levels found in brain, colon, heart, kidney, prostate, small intestine and stomach.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

CRTC2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

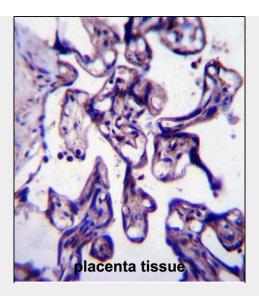
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CRTC2 Antibody (N-term) - Images



CRTC2 Antibody (N-term) (Cat. #AP14321a) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the CRTC2 antibody detected the CRTC2 protein (arrow).





CRTC2 Antibody (N-term) (Cat. #AP14321a)immunohistochemistry analysis in formalin fixed and paraffin embedded human placenta tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of CRTC2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

CRTC2 Antibody (N-term) - Background

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).

CRTC2 Antibody (N-term) - References

Nakatsu, Y., et al. J. Biol. Chem. 285(43):33018-33027(2010) Kaizuka, T., et al. J. Biol. Chem. 285(26):20109-20116(2010) Lyo, D., et al. Biochem. Biophys. Res. Commun. 396(2):562-565(2010) Lu, M., et al. J. Am. Soc. Nephrol. 21(5):811-818(2010) Roulin, D., et al. Mol. Cancer 9, 57 (2010) :