10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CRTC3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1521a

Specification

CRTC3 Antibody - Product Information

Application	**WB, IHC, ICC, E**
Primary Accession	Q6UUV7
Reactivity	**Human, Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**68kDa KDa**

Description
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 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: Predominantly expressed in B and T lymphocytes. Highest levels in lung. Also expressed in brain, colon, heart, kidney, ovary, and prostate. Weak expression in liver, pancreas, muscle, small intestine, spleen and stomach.

Immunogen
Purified recombinant fragment of human CRTC3 expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

CRTC3 Antibody - Additional Information

Gene ID 64784

Other Names
CREB-regulated transcription coactivator 3, Transducer of regulated cAMP response element-binding protein 3, TORC-3, Transducer of CREB protein 3, CRTC3, TORC3

Dilution
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
ICC~~N/A
E~~1/10000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CRTC3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CRTC3 Antibody - Protein Information

Name CRTC3

Synonyms TORC3

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 the expression of specific CREB-activated 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).

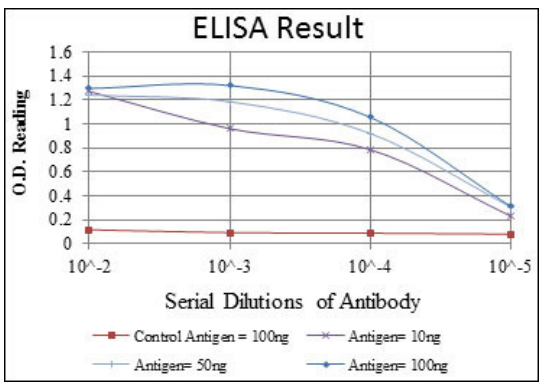
Cellular Location
Nucleus. Cytoplasm. Note=Appears to be mainly nuclear (PubMed:15454081). Translocates to the nucleus following adenylyl cyclase or MAP kinase activation (PubMed:30611118)

Tissue Location
Predominantly expressed in B and T lymphocytes. Highest levels in lung. Also expressed in brain, colon, heart, kidney, ovary, and prostate. Weak expression in liver, pancreas, muscle, small intestine, spleen and stomach.

CRTC3 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

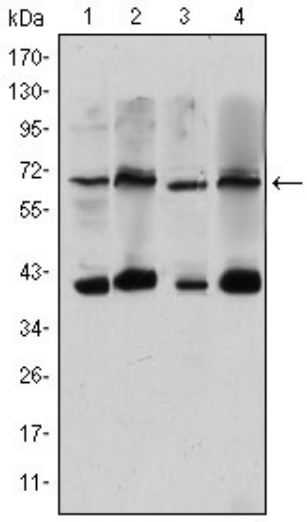


Figure 1: Western blot analysis using CRTC3 mouse mAb against Hela (1), Jurkat (2), Cos7 (3) and MCF-7 (4) cell lysate.

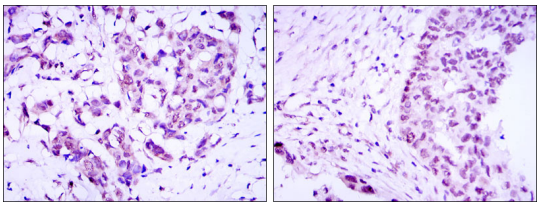


Figure 2: Immunohistochemical analysis of paraffin-embedded breast cancer (left) and ovarian cancer (right) using CRTC3 mouse mAb with DAB staining.

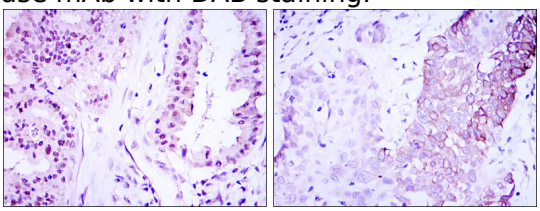


Figure 3: Immunohistochemical analysis of paraffin-embedded lung cancer (left) and esophagus cancer (right) using CRTC3 mouse mAb with DAB staining.

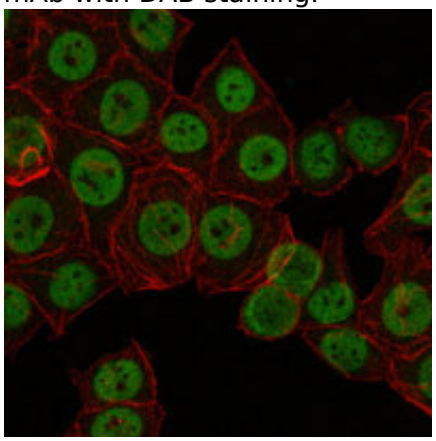


Figure 4: Immunofluorescence analysis of NTERA-2 cells using CRTC3 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

CRTC3 Antibody - References

1. Mod Pathol. 2009 Dec;22(12):1575-81. 2. Genes Chromosomes Cancer. 2008 Mar;47(3):203-6.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999