

KD-Validated Anti-CRTC2 Rabbit Monoclonal Antibody

Rabbit monoclonal Antibody Catalog # AGI2213

Specification

KD-Validated Anti-CRTC2 Rabbit Monoclonal Antibody - Product Information

Application WB, FC
Primary Accession Q53ET0

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 73 kDa, observed, 75-80 kDa

KDa CRTC

Gene Name CRTC2

Aliases CRTC2; CREB Regulated Transcription

Coactivator 2; TORC2; CREB-Regulated Transcription Coactivator 2; TORC-2; Transducer Of Regulated CAMP Response

Element-Binding Protein (CREB) 2;

Transducer Of Regulated CAMP Response Element-Binding Protein 2; Transducer Of

CREB Protein 2

Immunogen A synthesized peptide derived from human

TORC2

KD-Validated Anti-CRTC2 Rabbit Monoclonal Antibody - 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

KD-Validated Anti-CRTC2 Rabbit Monoclonal Antibody - 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

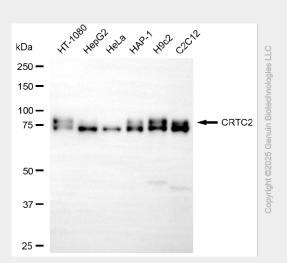
Most abundantly expressed in the thymus. Present in both B and T-lymphocytes. Highly expressed in HEK293T cells and in insulinomas. High levels also in spleen, ovary, muscle and lung, with highest levels in muscle. Lower levels found in brain, colon, heart, kidney, prostate, small intestine and stomach.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

KD-Validated Anti-CRTC2 Rabbit Monoclonal Antibody - Protocols

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

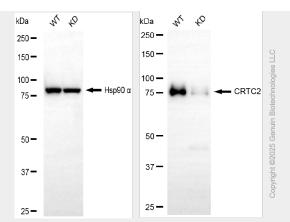
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-CRTC2 Rabbit Monoclonal Antibody - Images

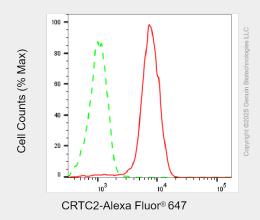


Western blotting analysis using anti-CRTC2 antibody (Cat#AGI2213). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CRTC2 antibody (Cat#AGI2213, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-CRTC2 antibody (Cat#AGI2213). CRTC2 expression in wild-type (WT) and CRTC2 knockdown (KD) 293T cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-CRTC2 antibody (Cat#AGI2213, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of CRTC2 expression in C2C12 cells using anti-CRTC2 antibody (Cat#AGI2213, 1:2,000). Green, isotype control; red, CRTC2.