CRTC2 Mouse Monoclonal Antibody

E10-30120

Background: Glucose homeostasis is regulated by hormones and cellular energy status. Elevations of blood glucose during feeding stimulate insulin release from pancreatic β-cells through a glucose sensing pathway. Feeding also stimulates release of gut hormones such as glucagon-like peptide-1 (GLP-1), which further induces insulin release, inhibits glucagon release and promotes β-cell viability. CREB-dependent transcription likely plays a role in both glucose sensing and GLP-1 signaling . The protein Torc2 (transducer of regulated CREB activity 2) functions as a CREB co-activator and is implicated in mediating the effects of these two pathways . In quiescent cells, Torc2 is phosphorylated at Ser171 and becomes sequestered in the cytoplasm via an interaction with 14-3-3 proteins. Glucose and gut hormones lead to the dephosphorylation of Torc2 and its dissociation from 14-3-3 proteins. Dephosphorylated Torc2 enters the nucleus to promote CREB-dependent transcription.

Catalog Number: E10-30120

Amount: 100μg/100μl

Clone Number: 5B10

Species: Mouse IgG1

MW: 80kDa

Aliases: TORC2; TORC-2; CRTC2

Entrez Gene: 200186

Immunogen: Purified recombinant fragment of human CRTC2 expressed in E. Coli.

Storage: Store at 4℃, for long term storage, store at -20℃.

Formulation: Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human; Monkey

Tested Applications: WB, IHC, IF, FC, ELISA. Not yet tested in other applications.

Application notes: WB:1/500 - 1/2000,IHC:1/200 - 1/1000,IF:1/200-1/1000,FC:1/200-1/400, ELISA: Propose dilution 1/10000.

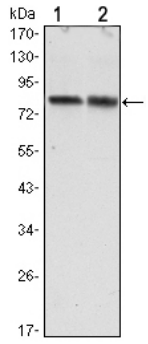

Figure 1: Western blot analysis using CRTC2 mouse mAb against Hela (1) and HEK293 (2) cell lysate.

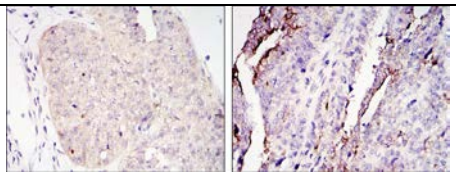

Figure 2: Immunohistochemical analysis of paraffin-embedded ovary tumour tissues (left) and lung cancer (right) using CRTC2 mouse mAb with DAB staining.

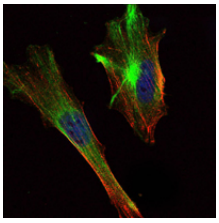

Figure 3: Immunofluorescence analysis of Hela cells using CRTC2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

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