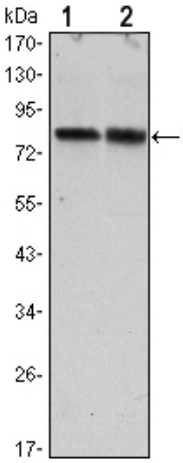
TORC2 Monoclonal Antibody

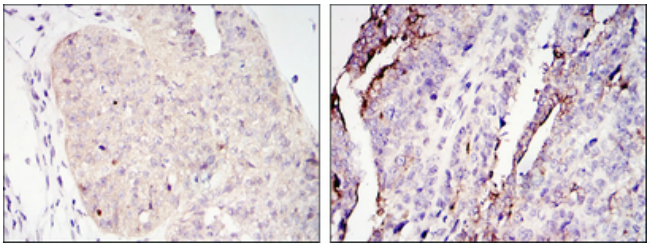
Catalog No	YP-Ab-01031
Isotype	IgG
Reactivity	Human;Monkey
Applications	WB;IHC;IF;FCM;ELISA
Gene Name	CRTC2
Immunogen	Purified recombinant fragment of human TORC2 expressed in E. Coli.
Specificity	TORC2 Monoclonal Antibody detects endogenous levels of TORC2 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CRTC2;TORC2;CREB-regulated transcription coactivator 2;TORC 2;Transducer of CREB protein 2;Transducer of regulated cAMP response element-binding protein 2;TORC-2
Observed Band	
Calculated Molecular Weight	73kD
Cell Pathway	Cytoplasm . Nucleus . 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 Specificity	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.
Function	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).,polymorphism:Variant Cys-379, under a dominant model, linked to a recessive mutation in LKB1, may be asssociated with susceptibility to type II or non-insulin-dependent diabetes mellitus (
Background	This gene encodes a member of the transducers of regulated cAMP response element-binding protein activity family of transcription coactivators. These proteins promote the transcription of genes targeted by the cAMP response element-binding protein, and therefore play an important role in many cellular processes. Under basal conditions the encoded protein is phosphorylated by AMP-activated protein kinase or the salt-inducible kinases and is sequestered in the cytoplasm. Upon activation by elevated cAMP or calcium, the encoded protein translocates to the nucleus and increases target gene expression. Single nucleotide polymorphisms in this gene may increase the risk of type 2 diabetes. A pseudogene of this gene is located on the long arm of chromosome 5. [provided by RefSeq, Dec 2010],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

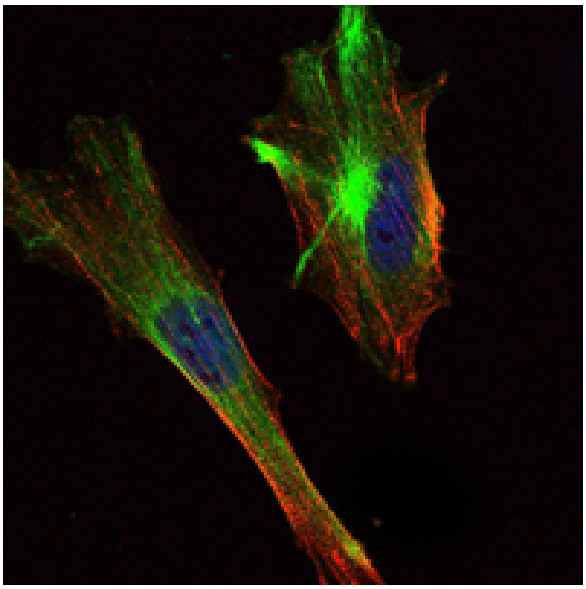
Products Images



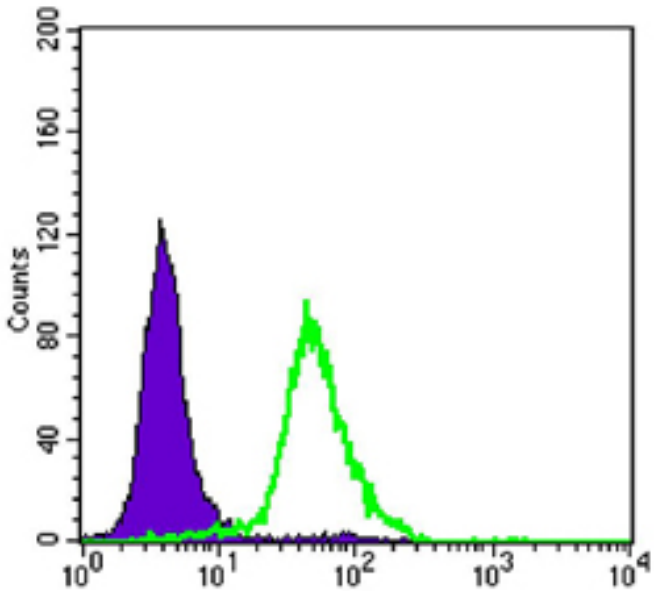
Western Blot analysis using TORC2 Monoclonal Antibody against HeLa (1) and HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded ovary tumour tissues (left) and lung cancer (right) with DAB staining using TORC2 Monoclonal Antibody.



Immunofluorescence analysis of Hela cells using TORC2 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Hela cells using TORC2 Monoclonal Antibody (green) and negative control (purple).