

# IHCeasy CRTC1 Ready-To-Use IHC Kit

Catalog Number: **KHC0802**

## General Information

Sample type:  
FFPE tissue  
Cited sample type:  
Reactivity:  
Human, Mouse, Rat  
Cited Reactivity:

Assay type:  
Immunohistochemistry  
Primary antibody type:  
Rabbit Polyclonal  
Secondary antibody type:  
Polymer-HRP-Goat anti-Rabbit

## Kit Component

Component	Size	Concentration
Antigen Retrieval Buffer	100 mL	50×
Washing Buffer	100 mL ×2	20×
Blocking Buffer	5 mL	RTU
Primary Antibody	5 mL	RTU
Secondary Antibody	5 mL	RTU
Chromogen Component A	0.2 mL	RTU
Chromogen Component B	4 mL	RTU
Signal Enhancer	5 mL	RTU
Counter Staining Reagent	5 mL	RTU
Mounting Media	5 mL	RTU
Control Slide	1 slide (Optional)	FFPE
Datasheet	1 Copy	
Manual	1 Copy	

## Storage Instructions

All the reagents are stored at 2-8°C. The kit is stable for 6 months from the date of receipt.

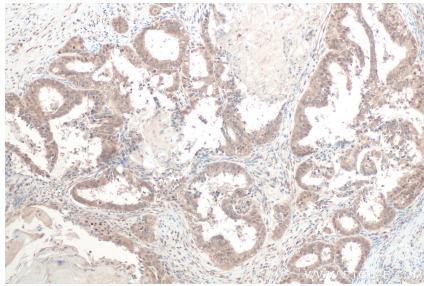
## Background

CRTC1, also named as MECT1, TORC1, and WAMTP1, belongs to the TORC family. It is a transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. CRTC1 acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. It enhances the interaction of CREB1 with TAF4. CRTC1 regulates the expression of specific CREB-activated genes such as the steroidogenic gene, StAR. It is a potent coactivator of PGC1α and inducer of mitochondrial biogenesis in muscle cells. CRTC1 is also a coactivator for TAX activation of the human T-cell leukemia virus type 1 (HTLV-1) long terminal repeats (LTR). In the hippocampus, CRTC1 involved in late-phase long-term potentiation (L-LTP) maintenance at the Schaffer collateral-CA1 synapses. It may be required for dendritic growth of developing cortical neurons.

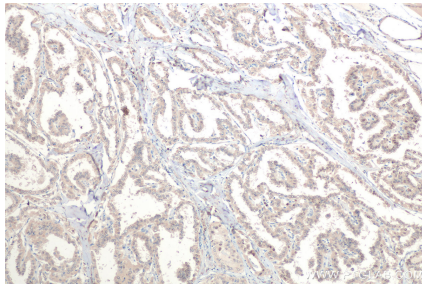
## Synonyms

CRTC1, KIAA0616, MECT1, TORC 1, TORC1, TORC1/CRTC1, Transducer of CREB protein 1, WAMTP1

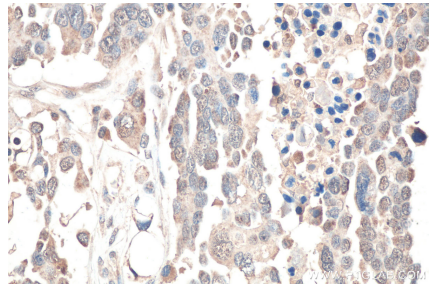
## Selected Validation Data



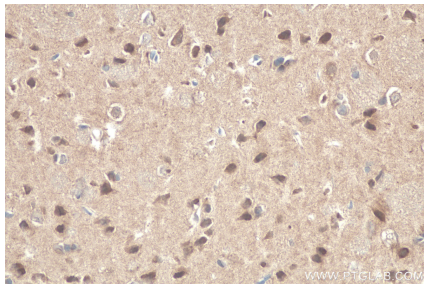
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using KHC0802 (CRTC1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using KHC0802 (CRTC1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using KHC0802 (CRTC1 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using KHC0802 (CRTC1 IHC Kit).