

IHCeasy[®] ATF4 Ready-To-Use IHC Kit

Catalog Number: **KHC1543**

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.

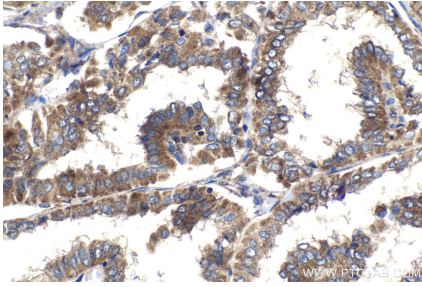
Background

ATF4 is a transcription factor, that accumulates predominantly in osteoblasts, where it regulates terminal osteoblast differentiation and bone formation. As a basic leucine-zipper (bZip) transcription factor, ATF4 can regulate amino acid metabolism, cellular redox state, and anti-stress responses. It also regulates age-related and diet-induced obesity and glucose homeostasis in mammals, and has conserved metabolic functions in flies. Due to its location at chromosome 22q13, a region linked to schizophrenia, ATF4 is considered as a positional candidate gene for schizophrenia. Otherwise, since ATF4 is induced by tumour microenvironmental factors, and regulates processes relevant to cancer progression, it might serve as a potential therapeutic target in cancer. ATF4 can bind DNA as a homodimer and as a heterodimer. ATF4 is ubiquitinated by SCF(BTRC) in response to mTORC1 signal, followed by proteasomal degradation and leading to down-regulate expression of SIRT4.

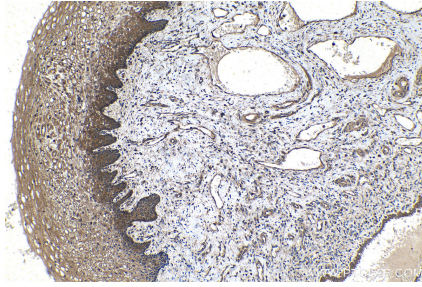
Synonyms

ATF4, CREB 2, CREB2, DNA binding protein TAXREB67, TAXREB67, TXREB

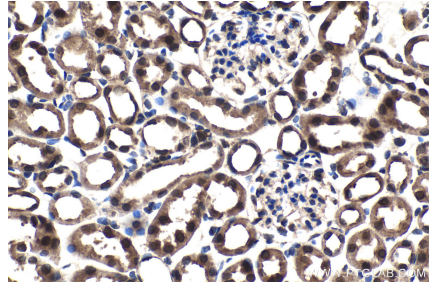
Selected Validation Data



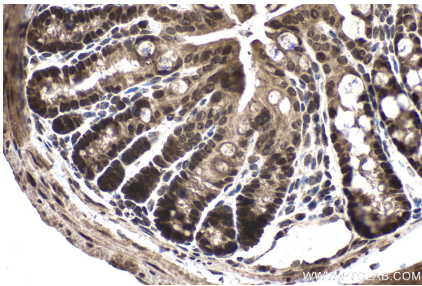
Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using KHC1543 (ATF4 IHC Kit).



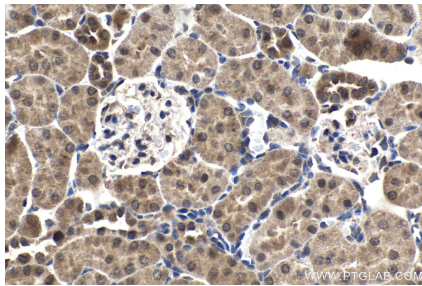
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using KHC1543 (ATF4 IHC Kit).



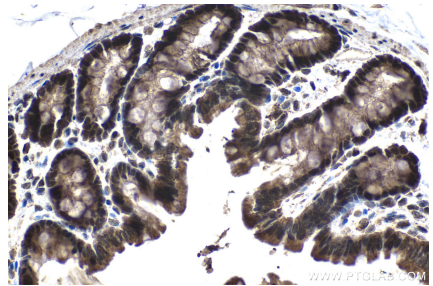
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using KHC1543 (ATF4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using KHC1543 (ATF4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using KHC1543 (ATF4 IHC Kit).



Immunohistochemical analysis of paraffin-embedded rat colon tissue slide using KHC1543 (ATF4 IHC Kit).