



# IHCeasy BATF Ready-To-Use IHC Kit

Catalog Number: KHC1759

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.

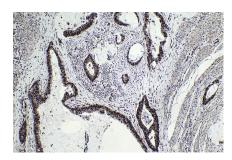
## Background

Basic leucine zipper transcription factor (BATF), also named B-cell-activating transcription factor, SF-HT-activated gene 2 protein. AP-1 family transcription factor that controls the differentiation of lineage-specific cells in the immune system: specifically mediates the differentiation of T-helper 17 cells (Th17), follicular T-helper cells (TfH), CD8(+) dendritic cells and class-switch recombination (CSR) in B-cells. Acts via the formation of a heterodimer with JUNB that recognizes and binds DNA sequence 5'-TGA[CG]TCA-3'. The BATF-JUNB heterodimer also forms a complex with IRF4 (or IRF8) in immune cells, leading to recognition of AICE sequence (5'-TGANTCA/GAAA-3'), an immune-specific regulatory element, followed by cooperative binding of BATF and IRF4 (or IRF8) and activation of genes. Controls differentiation of T-helper cells producing interleukin-17 (Th17 cells) by binding to Th17-associated gene promoters: regulates expression of the transcription factor RORC itself and RORC target genes such as IL17 (IL17A or IL17B). Also involved in differentiation of follicular T-helper cells (TfH) by directing expression of BCL6 and MAF. In B-cells, involved in class-switch recombination (CSR) by controlling the expression of both AICDA and of germline transcripts of the intervening heavy-chain region and constant heavy-chain region (I(H)-C(H)). Following infection, can participate to CD8(+) dendritic cell differentiation via interaction with IRF4 and IRF8 to mediate cooperative gene activation. Regulates effector CD8(+) T-cell differentiation by regulating expression of SIRT1. Following DNA damage, part of a differentiation checkpoint that limits self-renewal of hematopoietic stem cells (HSCs): up-regulated by STAT3, leading to differentiation of HSCs, thereby restricting self-renewal of HSCs.

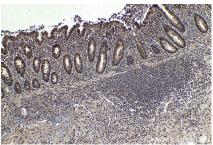
#### **Synonyms**

B ATF, BATF, BATF1, SF HT activated gene 2 protein, SFA 2, SFA2

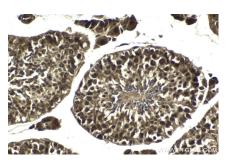
# Selected Validation Data



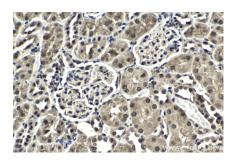
Immunohistochemical analysis of paraffinembedded human urothelial carcinoma tissue slide using KHC1759 (BATF IHC Kit).



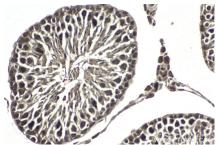
Immunohistochemical analysis of paraffinembedded human appendicitis tissue slide using KHC1759 (BATF IHC Kit).



Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using KHC1759 (BATF IHC Kit).



Immunohistochemical analysis of paraffinembedded rat kidney tissue slide using KHC1759 (BATF IHC Kit).



Immunohistochemical analysis of paraffinembedded rat testis tissue slide using KHC1759 (BATF IHC Kit).