

For Research Use Only

BATF Polyclonal antibody

Catalog Number: 13507-1-AP **3 Publications**



Basic Information

Catalog Number: 13507-1-AP	GenBank Accession Number: BC032294	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 350 ug/ml by Nanodrop and 180 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 10538	Recommended Dilutions: IF/ICC 1:200-1:800
Source: Rabbit	UNIPROT ID: Q16520	
Isotype: IgG	Full Name: basic leucine zipper transcription factor, ATF-like	
Immunogen Catalog Number: AG4418	Calculated MW: 125 aa, 14 kDa	

Applications

Tested Applications: IF/ICC, ELISA	Positive Controls: IF/ICC : HepG2 cells,
Cited Applications: WB	
Species Specificity: human, mouse, rat	
Cited Species: human, mouse, rat	

Background Information

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'-TGANTCAGAAA-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. The molecular mass of BATF is 14kd.

Notable Publications

Author	Pubmed ID	Journal	Application
Tao Yang	33340526	Life Sci	WB
Chen Yang	39515328	Cancer Cell	WB
Ma Libing L	23327998	Regul Pept	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
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Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using BATF antibody (13507-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).