

For Research Use Only

BATF Polyclonal antibody

Catalog Number: 13507-1-AP **2 Publications**



Basic Information

Catalog Number: 13507-1-AP	GenBank Accession Number: BC032294	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 350 µg/ml by Nanodrop and 180 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 10538	Recommended Dilutions: IF 1:10-1:100
Source: Rabbit	Full Name: basic leucine zipper transcription factor, ATF-like	
Isotype: IgG	Calculated MW: 125 aa, 14 kDa	
Immunogen Catalog Number: AG4418		

Applications

Tested Applications: IF, ELISA	Positive Controls: IF : HepG2 cells, Hela cells
Cited Applications: WB	
Species Specificity: human, mouse, rat	
Cited Species: 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'-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. The molecular mass of BATF is 14kd.

Notable Publications

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

Storage

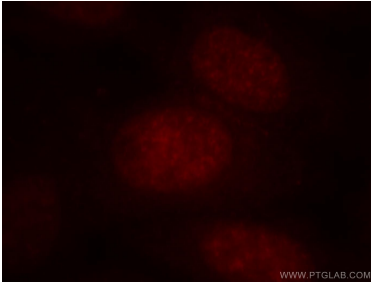
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
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Selected Validation Data



Immunofluorescent analysis of HepG2 cells, using BATF antibody 13507-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



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