

BATF Polyclonal Antibody

Catalog number: 13507-1-AP

Size: 27 µg/150 µl

Source: Rabbit

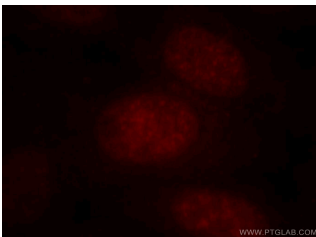
Isotype: IgG

Synonyms:

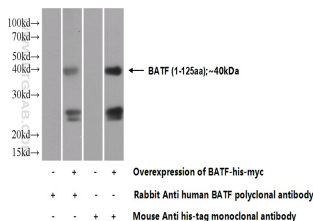
BATF; B ATF, BATF, BATF1, SF

HT activated gene 2 protein,

SFA 2, SFA2



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



Transfected HEK-293 cells were subjected to SDS PAGE followed by western blot with 13507-1-AP (BATF Antibody) at dilution of 1:1000

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. The molecular mass of BATF is 14kd.

Applications

Tested applications:	ELISA, IF, WB
Cited applications:	WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Mouse
Calculated BATF MW:	125aa, 14 kDa
Observed BATF MW:	
Positive WB detected in	Transfected HEK-293 cells
Positive IF detected in	HepG2 cells, Hela cells
Recommended dilution:	WB: 1:500-1:5000 IF: 1:10-1:100

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag4418
GenBank accession number:	BC032294
Gene ID (NCBI):	10538
Full name:	Basic leucine zipper transcription factor, ATF-like

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20°C.

