

For Research Use Only

BATF Polyclonal antibody

Catalog Number: 13507-1-AP

4 Publications



Basic Information

Catalog Number:

13507-1-AP

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4418

GenBank Accession Number:

BC032294

GeneID (NCBI):

10538

UNIPROT ID:

Q16520

Full Name:

basic leucine zipper transcription factor, ATF-like

Calculated MW:

125 aa, 14 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

IF/ICC: 1:200-1:800

Applications

Tested Applications:

IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

IF/ICC : HepG2 cells,

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
Kaijie Tang	40639087	Biochem Biophys Res Commun	WB
Chen Yang	39515328	Cancer Cell	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

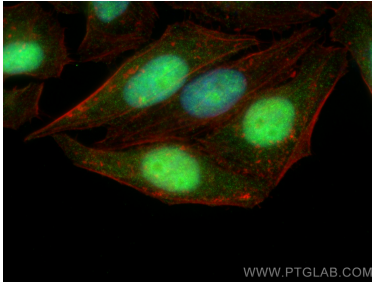
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

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).