

BATF Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16614A

Product Information

Application	WB, E
Primary Accession	Q16520
Other Accession	NP_006390.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35947
Calculated MW	14120
Antigen Region	7-35

Additional Information

Gene ID	10538
Other Names	Basic leucine zipper transcriptional factor ATF-like, B-cell-activating transcription factor, B-ATF, SF-HT-activated gene 2 protein, SFA-2, BATF
Target/Specificity	This BATF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 7-35 amino acids from the N-terminal region of human BATF.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BATF Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BATF
Function	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 in 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 (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978}. Cytoplasm. Note=Present in the nucleus and cytoplasm, but shows increased nuclear translocation after activation of T-cells

Tissue Location

Expressed at highest levels in lung, and at lower levels in placenta, liver, kidney, spleen, and peripheral blood Detected in SW480 colorectal cancer cell line and several hematopoietic tumor cell lines, including Raji Burkitt's lymphoma. Strongly expressed in mature B- and T-lymphocytes. Also expressed in moderate levels in lymph node and appendix and at low levels in thymus and bone marrow (PubMed:10777209).

Background

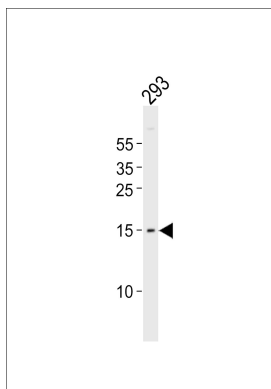
The protein encoded by this gene is a nuclear basic leucine zipper protein that belongs to the AP-1/ATF superfamily of transcription factors. The leucine zipper of this protein mediates dimerization with members of the Jun family of proteins. This protein is thought to be a negative regulator of AP-1/ATF transcriptional events.

References

Quigley, M., et al. Nat. Med. 16(10):1147-1151(2010)
 Stahl, E.A., et al. Nat. Genet. 42(6):508-514(2010)
 Deppmann, C.D., et al. Biochem. J. 374 (PT 2), 423-431 (2003) :
 Deppmann, C.D., et al. Biochem. J. 374 (PT 2), 423-431 (2003) :
 Johansen, L.M., et al. J. Virol. 77(10):6029-6040(2003)

Images

Western blot analysis of lysate from 293 cell line, using BATF Antibody (N-term)(Cat. #AP16614a). AP16614a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.