10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BATF Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP16614a

Specification

BATF Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q16520

BATF Antibody (N-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BATF Antibody (N-term) Blocking Peptide - 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).

BATF Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

BATF Antibody (N-term) Blocking Peptide - Images

BATF Antibody (N-term) Blocking Peptide - Background

The protein encoded by this gene is a nuclear basicleucine zipper protein that belongs to the AP-1/ATF superfamily oftranscription factors. The leucine zipper of this protein mediatesdimerization with members of the Jun family of proteins. Thisprotein is thought to be a negative regulator of AP-1/ATFtranscriptional events.

BATF Antibody (N-term) Blocking Peptide - 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)