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BATF
Purified Mouse Monoclonal Antibody
Catalog # AO2629a

Specification

BATF - Product Information

Application	**WB, IHC, ICC, E**
Primary Accession	Q16520
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**14.1kDa KDa**

Immunogen
Purified recombinant fragment of human BATF (AA:1-126) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

BATF - Additional Information

Gene ID 10538

Other Names
SFA2; B-ATF; BATF1; SFA-2

Dilution
WB~~ 1/500 - 1/2000
IHC~~1:100~500
ICC~~N/A
E~~ 1/10000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
BATF is for research use only and not for use in diagnostic or therapeutic procedures.

BATF - 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 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BATF - Images

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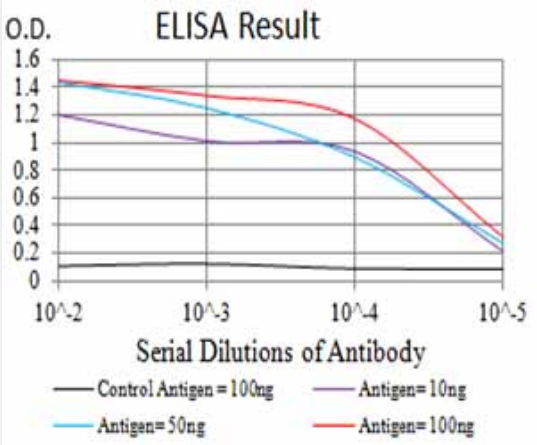

Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

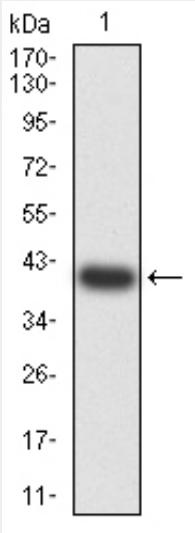

Figure 2:Western blot analysis using BATF mAb against human BATF (AA: 1-126) recombinant protein. (Expected MW is 40.1 kDa)

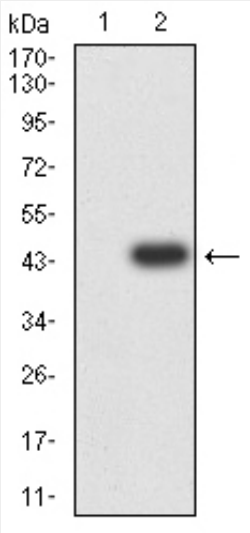

Figure 3:Western blot analysis using BATF mAb against HEK293 (1) and BATF (AA: 1-126)-hIgGFc transfected HEK293 (2) cell lysate.

BATF - References

1.J Clin Invest. 2013 Nov;123(11):4641-53.2.J Immunol. 2003 Mar 1;170(5):2417-26.