abcam

Product datasheet

Anti-BATF antibody ab196762

1 Image

Overview

Product name Anti-BATF antibody

Description Rabbit polyclonal to BATF

Host species Rabbit

Tested applications Suitable for: ℍC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse

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Immunogen Synthetic peptide corresponding to Human BATF (internal sequence).

Database link: Q16520

Positive control Paraffin-embedded Human breast carcinoma tissue

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, 49% PBS

PBS is without Mg²⁺ and Ca²⁺

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab196762 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/50 - 1/100.

Target

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 Thelper 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 immunespecific 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 Bcells, 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): upregulated by STAT3, leading to differentiation of HSCs, thereby restricting self-renewal of HSCs.

Tissue specificity

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).

Sequence similarities

Belongs to the bZIP family.

Contains 1 bZIP (basic-leucine zipper) domain.

Post-translational

modifications

Phosphorylated on serine and threonine residues and at least one tyrosine residue.

Phosphorylation at Ser-43 inhibit DNA binding activity and transforms it as a negative regulator of

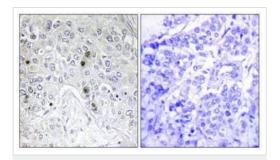
AP-1 mediated transcription.

Phosphorylated.

Cellular localization

Nucleus. Cytoplasm. Present in the nucleus and cytoplasm, but shows increased nuclear translocation after activation of T-cells.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-BATF antibody (ab196762)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling BATF with ab196762 at 1/50 dilution.

Right panel was preincubated with blocking peptide.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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