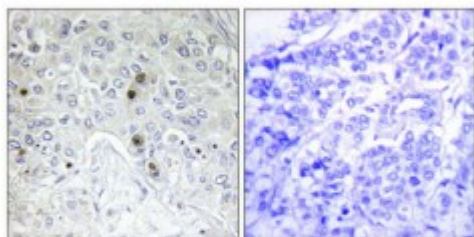


Anti-B-ATF antibody



Description	Rabbit polyclonal to B-ATF.
Model	STJ91819
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IHC
Immunogen	Synthesized peptide derived from human B-ATF
Immunogen Region	10-90 aa, N-terminal
Gene ID	10538
Gene Symbol	BATF
Dilution range	IHC 1:100-1:300ELISA 1:5000
Specificity	B-ATF Polyclonal Antibody detects endogenous levels of B-ATF protein.
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 .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Basic leucine zipper transcriptional factor ATF-like B-cell-activating

	transcription factor B-ATF SF-HT-activated gene 2 protein SFA-2
Molecular Weight	14.12 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:958OMIM:612476
Alternative Names	Basic leucine zipper transcriptional factor ATF-like B-cell-activating transcription factor B-ATF SF-HT-activated gene 2 protein SFA-2
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 .
Cellular Localization	Nucleus Cytoplasm. Present in the nucleus and cytoplasm, but shows increased nuclear translocation after activation of T-cells.
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.