

DESCRIPTION

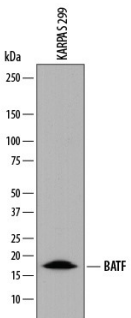
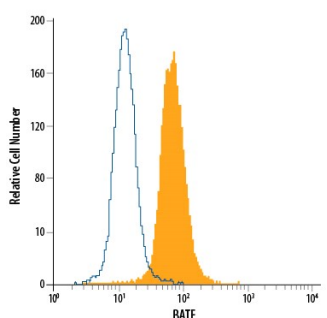
Species Reactivity	Human
Specificity	Detects human BATF in ELISA and Western Blot.
Source	Monoclonal Mouse IgG _{2B} Clone # 687706
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human BATF Met1-Pro125 Accession # Q16520
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human BATF by Western Blot. Western blot shows lysates of KARPAS 299 human anaplastic large cell lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human BATF Monoclonal Antibody (Catalog # MAB8054) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for BATF at approximately 17 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Flow Cytometry</p>  <p>Detection of BATF in Raji Human Cell Line by Flow Cytometry. Raji human Burkitt's lymphoma cell line was stained with Mouse Anti-Human BATF Monoclonal Antibody (Catalog # MAB8054, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

BATF is an approximately 20 kDa member of the AP-1 family of basic leucine zipper transcription factors. It associates with c-Jun proteins to form heterodimeric factors that inhibit transcription at AP-1 sites. The DNA binding of BATF is regulated by its phosphorylation at Ser43. BATF plays a key role in several aspects of immune system development. It suppresses the differentiation of NKT and iNKT cells, while it promotes the differentiation of Th17, Th2, follicular Th cells, CD8⁺ T cells, and CD8⁺ dendritic cells. It is required for class-switch recombination in B cells and T cells as well as for germinal center formation and B cell maturation. It is also required for the expression of T cell surface proteins that mediate homing of Th cells to the gut. BATF cooperates with IRF4 in binding to composite DNA elements that are responsive to both IRF4 and AP1. Human BATF1 shares 96% amino acid sequence identity with mouse and rat BATF1.