#8638 Store at -20°C

BATF (D7C5) Rabbit mAb

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Entrez-Gene ID #10538
UniProt ID #Q16520

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IF-IC, F Endogenous	H, M	15 kDa	Rabbit IgG**

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:100
Immunofluorescence (IF-IC)	1:800
Flow Cytometry	1:400

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

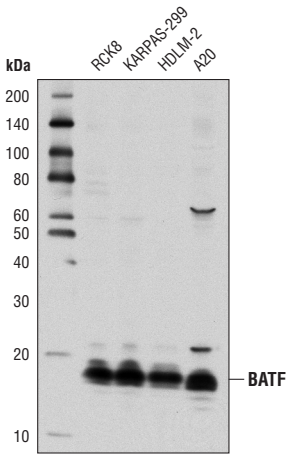
Background: Basic leucine zipper transcriptional factor ATF-like (BATF) is a basic leucine zipper (bZIP) transcription factor and is part of the AP-1/ATF family that forms inhibitory dimers with members of the Jun family (1-3). Expression of BATF is largely restricted with highest levels found in mature T cells, and it is induced in B cells following immune responses including viral infection (1,2). BATF expression is also induced by IL-6 via a Stat3-dependent mechanism (4). BATF plays an important role in the differentiation of immune cell lineages (5-7). Studies of BATF-deficient mice have demonstrated a critical role for BATF in the formation of IL-17-expressing Th17 cells, in part, by regulating the expression of IL-17 (5,6). BATF knockouts are resistant to experimental autoimmune encephalomyelitis (EEA), consistent with the role of Th17 cells in this model for autoimmunity (5). Additional studies have found that BATF is important in generating antibody class switching. BATF is required for the generation of follicular helper T cells (Tfh), by regulating BCL6 and c-Maf (6,7). In B cells, BATF controls the expression of activation-induced cytidine deaminase (AID) and regulates class-switched antibody responses (7). Taken together, these studies suggest that BATF is a key regulator of distinct populations of immune cells.

Specificity/Sensitivity: BATF (D7C5) Rabbit mAb detects endogenous levels of total BATF protein.

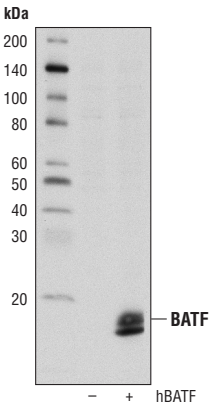
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human BATF protein.

Background References:

(1) Dorsey, M.J. et al. (1995) *Oncogene* 11, 2255-65.
(2) Hasegawa, H. et al. (1996) *Biochem Biophys Res Commun* 222, 164-70.
(3) Echlin, D.R. et al. (2000) *Oncogene* 19, 1752-63.
(4) Senga, T. et al. (2002) *Oncogene* 21, 8186-91.
(5) Schraml, B.U. et al. (2009) *Nature* 460, 405-9.
(6) Betz, B.C. et al. (2010) *J Exp Med* 207, 933-42.
(7) Ise, W. et al. (2011) *Nat Immunol* 12, 536-43.

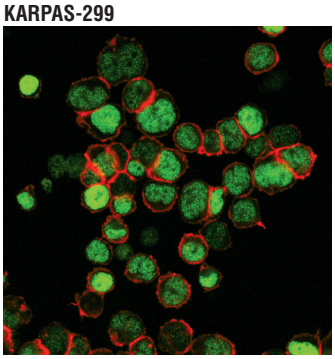


Western blot analysis of extracts from various cell lines using BATF (D7C5) Rabbit mAb. Cell Line Source: Dr Abraham Karpas at the University of Cambridge.

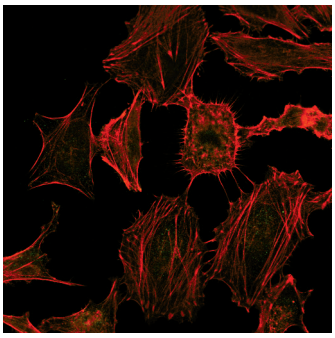


Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct encoding full-length human BATF (hBATF; +), using BATF (D7C5) Rabbit mAb.

KARPAS-299



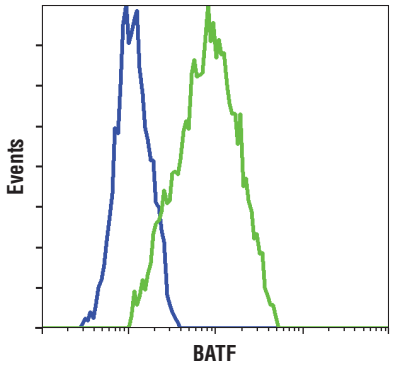
HeLa



Confocal immunofluorescent analysis of KARPAS-299 (upper) and HeLa (lower) cells using BATF (D7C5) Rabbit mAb (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red). Cell Line Source: Dr Abraham Karpas at the University of Cambridge.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



Flow cytometric analysis of HeLa (blue) and KARPAS-299 (green) cells using BATF (D7C5) Rabbit mAb. Cell Line Source: Dr Abraham Karpas at the University of Cambridge.