

#8638 Store at -20C

BATF (D7C5) Rabbit mAb



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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, FC-FP	H M	Endogenous	15	Rabbit IgG	#Q16520	10538

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:100
1:400 - 1:1600

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.

For a carrier free (BSA and azide free) version of this product see product #27977.

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

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.

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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Limited Uses

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