# **BATF Antibody**

Catalog No: #33911

Package Size: #33911-1 50ul #33911-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

### Description

| Product Name          | BATF Antibody  |
|-----------------------|--|
| Host Species          | Rabbit   |
| Clonality             | Polyclonal   |
| Purification          | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific |
|                       | immunogen.   |
| Applications          | IHC;IF;ELISA   |
| Species Reactivity    | Human;Mouse  |
| Specificity           | The antibody detects endogenous levels of total BATF protein.  |
| Immunogen Type        | Peptide  |
| Immunogen Description | Synthesized peptide derived from internal of human BATF.   |
| Target Name           | BATF   |
| Other Names           | B-ATF; SF-HT-activated gene 2 protein; SFA-2;  |
| Accession No.         | Swiss-Prot: Q16520NCBI Gene ID: 10538  |
| SDS-PAGE MW           | 14kd   |
| Concentration         | 1.0mg/ml   |
| Formulation           | Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide    |
|                       | and 50% glycerol.  |
| Storage               | Store at -20°C   |
|                       |  |

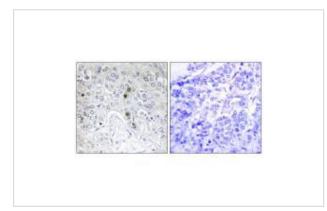
### Application Details

IHC 1:100 - 1:300.

ELISA: 1:5000..

IF 1:50-200

## Images



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using BATF antibody #33911.

#### Background

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 By similarity.

Dorsey M.J., Oncogene 11:2255-2265(1995).

Hasegawa H., Biochem. Biophys. Res. Commun. 222:164-170(1996).

Meyer N.P., Mamm. Genome 9:849-852(1998).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.