

# BATF3 Antibody

Catalog # ASC11841

## Specification

# BATF3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, E <u>O9NR55</u> <u>NP\_061134</u>, <u>8924246</u> Human Rabbit Polyclonal IgG Predicted: 14 kDa

Observed: 17 kDa KDa BATF3 body can be used for detection of BATF3 by Western blot at 1 - 2 µg/ml.

## Application Notes

# **BATF3 Antibody - Additional Information**

Gene ID

55509

Target/Specificity

BATF3; BATF3 antibody is human, mouse and rat reactive. BATF3 antibody is predicted to have no cross-reactivity to other BATF family members.

**Reconstitution & Storage** 

BATF3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

#### Precautions

BATF3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **BATF3 Antibody - Protein Information**

Name BATF3

Synonyms SNFT

Function

AP-1 family transcription factor that controls the differentiation of CD8(+) thymic conventional dendritic cells in the immune system. Required for development of CD8-alpha(+) classical dendritic cells (cDCs) and related CD103(+) dendritic cells that cross- present antigens to CD8 T-cells and produce interleukin-12 (IL12) in response to pathogens (By similarity). Acts via the formation of a heterodimer with JUN family proteins that recognizes and binds DNA sequence 5'-TGA[CG]TCA-3' and regulates expression of target genes.

#### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00978, ECO:0000269|PubMed:12087103}



# **BATF3 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **BATF3 Antibody - Images**



Western blot analysis of BATF3 in 293 cell lysate with BATF3 antibody at 1  $\mu$ g/ml in (A) the absence and (B) the presence of blocking peptide.

#### BATF3 Antibody - Background

BATF3, also known as SNFT, belongs to the basic leucine zipper transcriptional family and functions as a transcriptional repressor when heterodimerizing with Jun (1) and can repress the transcription of IL-2 and MMP-1 (1,2). BATF3 is required for the development of CD8alpha+ classical dendritic cells (DCs) and the related CD103+ DCs that cross-present antigens to CD8 T cells (3,4).

# **BATF3 Antibody - References**

Iacobelli M, Wachsman W, and McGuire KL. Repression of IL-2 promoter activity by the novel basic leucine zipper p21SNFT protein. J. Immunol. 2000; 154:860-8.

Bower KE, Fritz JM, and McGuire KL. Transcriptional repression of MMP-1 by p21SNFT and reduced invasiveness of hepatocarcinoma cells. Oncogene 2004; 23:8805-14.

Hildner K, Edelson BT, Purtha WE, et al. BATF3 deficiency reveals a critical role for CD8alpha+ dendritic cells in cytotoxic T cell immunity. Science 2008; 322:1097-1100.

Edelson BT, Peripheral CD103+ dendritic cells form a unified subset developmentally related to CD8alpha+ conventional dendritic cells. J. Exp. Med. 2010; 207:823-36.