

#### **USF1** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11078C

## **Specification**

#### **USF1** Antibody (Center) - Product Information

Application IF, WB, IHC-P, FC,E

Primary Accession P22415

Other Accession <u>Q61069</u>, <u>Q6XBT4</u>, <u>NP\_009053.1</u>

Reactivity Human, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 33538
Antigen Region 174-201

# **USF1** Antibody (Center) - Additional Information

## **Gene ID** 7391

#### **Other Names**

Upstream stimulatory factor 1, Class B basic helix-loop-helix protein 11, bHLHb11, Major late transcription factor 1, USF1, BHLHB11, USF

# **Target/Specificity**

This USF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 174-201 amino acids from the Central region of human USF1.

#### **Dilution**

IF~~1:10~50 WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

USF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **USF1 Antibody (Center) - Protein Information**



#### Name USF1

Synonyms BHLHB11, USF

**Function** Transcription factor that binds to a symmetrical DNA sequence (E-boxes) (5'-CACGTG-3') that is found in a variety of viral and cellular promoters.

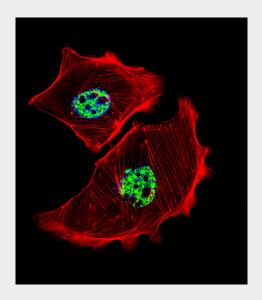
**Cellular Location** Nucleus.

# **USF1** Antibody (Center) - Protocols

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

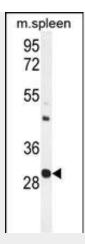
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **USF1** Antibody (Center) - Images

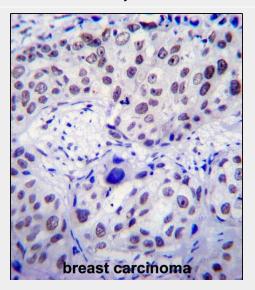


Fluorescent confocal image of SK-BR-3 cell stained with USF1 Antibody (Center)(Cat#AP11078c). SK-BR-3 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with USF1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C). Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10  $\mu$ g/ml, 10 min).USF1 immunoreactivity is localized to nucleus significantly.

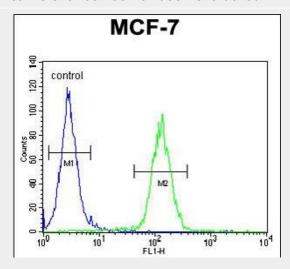




USF1 Antibody (Center) (Cat. #AP11078c) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the USF1 antibody detected the USF1 protein (arrow).



USF1 Antibody (Center) (Cat. #AP11078c)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of USF1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



USF1 Antibody (Center) (Cat. #AP11078c) flow cytometric analysis of MCF-7 cells (right



histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## **USF1** Antibody (Center) - Background

This gene encodes a member of the basic helix-loop-helix leucine zipper family, and can function as a cellular transcription factor. The encoded protein can activate transcription through pyrimidine-rich initiator (Inr) elements and E-box motifs. This gene has been linked to familial combined hyperlipidemia (FCHL). Two transcript variants encoding distinct isoforms have been identified for this gene.

# **USF1 Antibody (Center) - References**

Jablonski, K.A., et al. Diabetes 59(10):2672-2681(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Bussiere, F.I., et al. Cell. Microbiol. 12(8):1124-1133(2010)
Naukkarinen, J., et al. Circ Cardiovasc Genet 2(5):522-529(2009)
Singmann, P., et al. Obes Facts 2(4):235-242(2009)