# ATBF1 (H-150): sc-48807



The Power to Question

#### **BACKGROUND**

AT-motif binding factor 1 (ATBF1) binds to the AT-rich core sequence element in the human  $\alpha$ -fetoprotein enhancer. Alternative splicing generates the ATBF1-A and ATBF1-B. While ATBF1-A contains a 920-amino acid extension at the N-terminus, both ATBF1-A and ATBF1-B contain 4 DNA-binding homeobox domains. Additionally, ATBF1-A contains 23 zinc finger motifs while ATBF1-B contains 18 zinc finger motifs. The N-terminal extension unique to ATBF1-A has transcriptional repressor activity. In the small intestine, ATBF1-A inhibits expression of the brushborder enzyme aminopeptidase-N through direct binding to the AT motif element. Besides functioning in transcription regulation, ATBF1 also functions in ATPase activity. ATPase activity associated with ATBF1-A is DNA/RNA-dependent and requires both homeobox domains and zinc finger motifs. ATBF1 is highly expressed in spleen and brain tissues. The gene encoding human ATBF1 maps to chromosome 16q22.2.

#### CHROMOSOMAL LOCATION

Genetic locus: ZFHX3 (human) mapping to 16q22.2; Zfhx3 (mouse) mapping to 8 D3.

#### **SOURCE**

ATBF1 (H-150) is a rabbit polyclonal antibody raised against amino acids 2371-2520 mapping within an internal region of ATBF1 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48807 X, 200  $\mu$ g/0.1 ml.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **APPLICATIONS**

ATBF1 (H-150) is recommended for detection of ATBF1-A and ATBF1-B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ATBF1 (H-150) is also recommended for detection of ATBF1-A and ATBF1-B in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ATBF1 siRNA (h): sc-37694, ATBF1 siRNA (m): sc-37695, ATBF1 shRNA Plasmid (h): sc-37694-SH, ATBF1 shRNA Plasmid (m): sc-37695-SH, ATBF1 shRNA (h) Lentiviral Particles: sc-37694-V and ATBF1 shRNA (m) Lentiviral Particles: sc-37695-V.

ATBF1 (H-150) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ATBF1-A: 404 kDa.

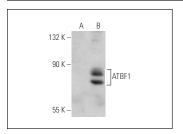
Molecular Weight of ATBF1-B: 306 kDa.

Positive Controls: ATBF1 transfected CHO whole cell lysate.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **DATA**



ATBF1 (H-150): sc-48807. Western blot analysis of ATBF1 expression in non-transfected CHO (**A**) and human ATBF1 transfected CHO (**B**) whole cell lysates.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **ATBF1 (3B1): sc-517126**, our highly recommended monoclonal alternative to ATBF1 (H-150).

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