# MCAF2 (H-300): sc-135301



The Power to Question

## **BACKGROUND**

MCAF2 (MBD1-containing chromatin-associated factor 2), also known as ATF7IP2 (activating transcription factor 7-interacting protein 2), is a 682 amino acid nuclear protein that exists as 2 alternatively spliced isoforms. MCAF2 can act as either an activator or repressor, thereby modulating chromatin formation and/or transcription regulation by linking transcription factors to transcription apparatuses. A member of the MCAF family, MCAF2 contains one fibronectin type-III domain and is thought to form a complex with ESET and MBD1. The gene encoding MCAF2 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

# **REFERENCES**

- Baraitser, M., et al. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
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- 3. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. Nat. Genet. 26: 370-374.
- Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. Curr. Gastroenterol. Rep. 6: 467-473.
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- Ichimura, T., et al. 2005. Transcriptional repression and heterochromatin formation by MBD1 and MCAF/AM family proteins. J. Biol. Chem. 280: 13928-13935.
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## CHROMOSOMAL LOCATION

Genetic locus: ATF7IP2 (human) mapping to 16p13.13.

## **SOURCE**

MCAF2 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of MCAF2 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-135301 X, 200  $\mu g/0.1$  ml.

#### **APPLICATIONS**

MCAF2 (H-300) is recommended for detection of MCAF2 of 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).

Suitable for use as control antibody for MCAF2 siRNA (h): sc-93392, MCAF2 shRNA Plasmid (h): sc-93392-SH and MCAF2 shRNA (h) Lentiviral Particles: sc-93392-V.

MCAF2 (H-300) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of MCAF2 isoforms: 75/61 kDa.

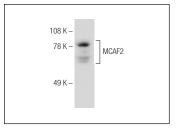
Molecular Weight (observed) of MCAF2: 87 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

## **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**



MCAF2 (H-300): sc-135301. Western blot analysis of MCAF2 expression in K-562 whole cell lysate.

## **STORAGE**

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

# **RESEARCH USE**

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

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