SANTA CRUZ BIOTECHNOLOGY, INC.

ATF-7IP (M-113): sc-98374



BACKGROUND

ATF-7IP (activating transcription factor 7-interacting protein 1, MBD1-containing chromatin-associated factor 1) is a 1,270 amino acid protein encoded by the human gene ATF7IP. ATF-7IP can both act as an activator or a repressor depending on the context. ATF-7IP functions as a recruiter that couples transcriptional factors to general transcription apparatus and thereby modulates transcription regulation and chromatin formation. It mediates MBD1-dependent transcriptional repression, probably by recruiting complexes containing SETDB1. ATF-7IP is required to stimulate the histone methyltransferase activity of SETDB1 and it facilitates the conversion of dimethylated to trimethylated H3 "Lys 9". The complex formed by ATF-7IP, MBD1 and SETDB1 also acts to couple DNA methylation to histone "Lys 9" trimethylation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Atf7ip (mouse) mapping to 6 G1.

SOURCE

ATF-7IP (M-113) is a rabbit polyclonal antibody raised against amino acids 1058-1161 mapping near the C-terminus of ATF-7IP of mouse origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ATF-7IP (M-113) is recommended for detection of ATF-7IP of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

ATF-7IP (M-113) is also recommended for detection of ATF-7IP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ATF-7IP siRNA (m): sc-141319, ATF-7IP shRNA Plasmid (m): sc-141319-SH and ATF-7IP shRNA (m) Lentiviral Particles: sc-141319-V.

Molecular Weight of ATF-7IP: 137 kDa.

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.

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try ATF-7IP (C-1): sc-166753 or ATF-7IP (B-7): sc-166767, our highly recommended monoclonal alternatives to ATF-7IP (M-113).