

ATF-6 α (F-7): sc-166659

BACKGROUND

ATF-6 is a member of the basic-leucine zipper family of transcription factors. Endoplasmic reticulum stress causes cleavage of transmembrane ATF-6 and translocation of active ATF-6 to the nucleus. Soluble ATF-6 can exist as either an ATF-6 β homodimer or an ATF-6 α / β heterodimer. Binding of the ATF-6 β homodimer or ATF-6 α / β heterodimer to the nuclear transcription factor Y C (NF-YC) induces ER chaperone transcription.

CHROMOSOMAL LOCATION

Genetic locus: ATF6 (human) mapping to 1q23.3; Atf6 (mouse) mapping to 1 H3.

SOURCE

ATF-6 α (F-7) is a mouse monoclonal antibody raised against amino acids 31-310 of ATF-6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain 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-166659 X, 200 μ g/0.1 ml.

ATF-6 α (F-7) is available conjugated to agarose (sc-166659 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166659 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166659 PE), fluorescein (sc-166659 FITC), Alexa Fluor[®] 488 (sc-166659 AF488), Alexa Fluor[®] 546 (sc-166659 AF546), Alexa Fluor[®] 594 (sc-166659 AF594) or Alexa Fluor[®] 647 (sc-166659 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166659 AF680) or Alexa Fluor[®] 790 (sc-166659 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ATF-6 α (F-7) is recommended for detection of ATF-6 α of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 ATF-6 α siRNA (h): sc-37699, ATF-6 α siRNA (m): sc-45950, ATF-6 α shRNA Plasmid (h): sc-37699-SH, ATF-6 α shRNA Plasmid (m): sc-45950-SH, ATF-6 α shRNA (h) Lentiviral Particles: sc-37699-V and ATF-6 α shRNA (m) Lentiviral Particles: sc-45950-V.

ATF-6 α (F-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ATF-6 α : 90 kDa.

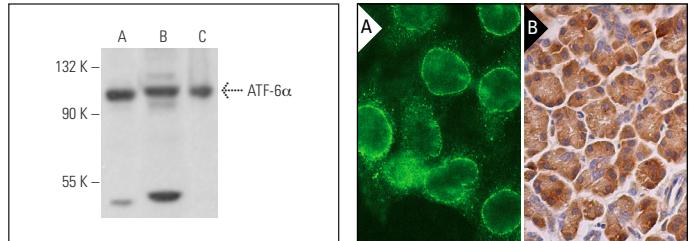
STORAGE

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.

DATA



ATF-6 α (F-7): sc-166659. Western blot analysis of ATF-6 α expression in MIA PaCa-2 (A) and MDA-MB-231 (B) whole cell lysates and MCF7 nuclear extract (C).

ATF-6 α (F-7): sc-166659. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear envelope staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells (B).

SELECT PRODUCT CITATIONS

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- Lim, W., et al. 2017. A critical role for adiponectin-mediated development of endometrial luminal epithelial cells during the peri-implantation period of pregnancy. *J. Cell. Physiol.* 232: 3146-3157.
- Pappas, S.S., et al. 2018. TorsinA dysfunction causes persistent neuronal nuclear pore defects. *Hum. Mol. Genet.* 27: 407-420.
- Sheng, X., et al. 2019. IRE1 α -XBP1s pathway promotes prostate cancer by activating c-MYC signaling. *Nat. Commun.* 10: 323.

PROTOCOLS

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