

ATF-6 α (N-16): sc-14250

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.

REFERENCES

1. Hai, T.W., Liu, F., Coukos, W.J. and Green, M.R. 1989. Transcription factor ATF cDNA clones: an extensive family of leucine zipper proteins able to selectively form DNA-binding heterodimers. *Genes Dev.* 3: 2083-2090.
2. Zhu, C., Johansen, F.E. and Prywes, R. 1997. Interaction of ATF6 and serum response factor. *Mol. Cell. Biol.* 17: 4957-4966.

CHROMOSOMAL LOCATION

Genetic locus: ATF6 (human) mapping to 1q23.3.

SOURCE

ATF-6 α (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ATF-6 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-14250 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-14250 X, 200 μ g/0.1 ml.

APPLICATIONS

ATF-6 α (N-16) is recommended for detection of ATF-6 α of human 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), 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).

ATF-6 α (N-16) is also recommended for detection of ATF-6 α in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ATF-6 α siRNA (h): sc-37699, ATF-6 α shRNA Plasmid (h): sc-37699-SH and ATF-6 α shRNA (h) Lentiviral Particles: sc-37699-V.

ATF-6 α (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

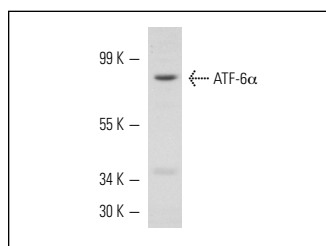
Molecular Weight of ATF-6 α : 90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or MCF7 nuclear extract: sc-2149.

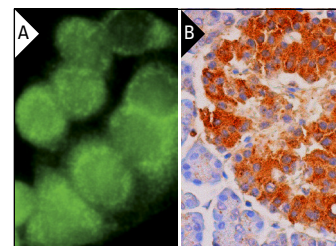
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



ATF-6 α (N-16): sc-14250. Western blot analysis of ATF-6 α expression in MCF7 nuclear extract.



ATF-6 α (N-16): sc-14250. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islets of Langerhans (B).

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
Satisfaction
Guaranteed

Try **ATF-6 α (F-7): sc-166659**, our highly recommended monoclonal alternatives to ATF-6 α (N-16). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **ATF-6 α (F-7): sc-166659**.