

HSFX1 (N-14): sc-160006

BACKGROUND

Prokaryotic and eukaryotic cells respond to thermal and chemical stress by inducing the expression of a group of genes that encode heat shock proteins. In eukaryotes, this gene expression is regulated primarily at the transcription level by a family of heat shock transcription factors (HSFs). HSFX1 (heat shock transcription factor family, X linked 1), also known as LW-1, is a 423 amino acid protein that is predominately expressed in testis. Localized to the cytoplasm, HSFX1 is thought to be involved in spermatogenesis and male fertility.

REFERENCES

1. Tanguay, R.M. 1988. Transcriptional activation of heat-shock genes in eukaryotes. *Biochem. Cell Biol.* 66: 584-593.
2. Kawazoe, Y., et al. 1998. Proteasome inhibition leads to the activation of all members of the heat-shock-factor family. *Eur. J. Biochem.* 255: 356-362.
3. Shinka, T., et al. 2004. Molecular characterization of heat shock-like factor encoded on the human Y chromosome, and implications for male infertility. *Biol. Reprod.* 71: 297-306.
4. Lim, J., et al. 2006. A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. *Cell* 125: 801-814.

CHROMOSOMAL LOCATION

Genetic locus: HSFX1 (human) mapping to Xq28.

SOURCE

HSFX1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HSFX1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-160006 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HSFX1 (N-14) is recommended for detection of HSFX1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with HSFX2.

Suitable for use as control antibody for HSFX1 siRNA (h): sc-91365, HSFX1 shRNA Plasmid (h): sc-91365-SH and HSFX1 shRNA (h) Lentiviral Particles: sc-91365-V.

Molecular Weight (predicted) of HSFX1: 47 kDa.

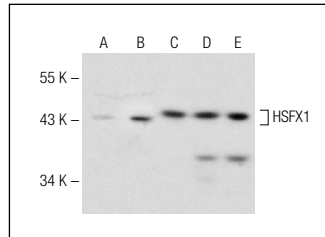
Molecular Weight (observed) of HSFX1: 41-53 kDa.

Positive Controls: HSFX1 (h2): 293T Lysate: sc-172157, Jurkat whole cell lysate: sc-2204 or HeLa nuclear extract : sc-2120.

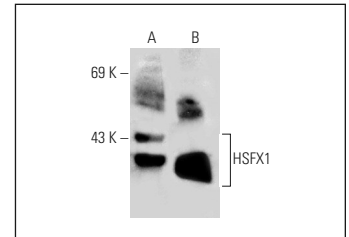
RECOMMENDED SECONDARY REAGENTS

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.

DATA



HSFX1 (N-14): sc-160006. Western blot analysis of HSFX1 expression in non-transfected 293T: sc-117752 (A), human HSFX1 transfected 293T: sc-172157 (B), Jurkat (C) and A-431 (D) whole cell lysates and HeLa nuclear extract (E).



HSFX1 (N-14): sc-160006. Western blot analysis of HSFX1 expression in mouse brain (A) and mouse prostate (B) tissue extracts.

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.