

# HSFX1 (S-15): sc-160007

## 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 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-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-160007 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HSFX1 (S-15) 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.

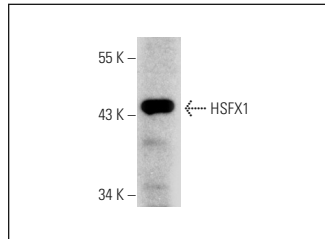
Molecular Weight (observed) of HSFX1: 41-53 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or A-431 whole cell lysate: sc-2201.

## 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 (S-15): sc-160007. Western blot analysis of HSFX1 expression in mouse brain tissue extract.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.