SANTA CRUZ BIOTECHNOLOGY, INC.

HSFX1 (D-12): sc-514753

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

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CHROMOSOMAL LOCATION

Genetic locus: HSFX1 (human) mapping to Xq28.

SOURCE

HSFX1 (D-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 13-26 near the N-terminus of HSFX1 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514753 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

HSFX1 (D-12) is recommended for detection of HSFX1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

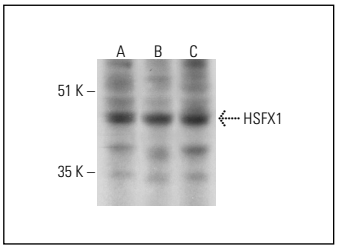
Molecular Weight (observed) of HSFX1: 41-53 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NTERA-2 cl.D1 whole cell lysate: sc-364181 or Hs 181 Tes whole cell lysate: sc-364779.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



HSFX1 (D-12): sc-514753. Western blot analysis of HSFX1 expression in Jurkat (**A**), Hs 181 Tes (**B**) and NTERA-2 cl.D1 (**C**) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.