

NFX1 (Y-14): sc-100973

BACKGROUND

NFX1 (nuclear transcription factor, X-box binding 1), also known as NFX2, is a ubiquitously expressed nucleic acid binding protein. Localizing to the nucleus, NFX1 contains an R3H domain, a RING-type zinc finger and nine NFX1-type zinc fingers. NFX1 is induced by IFN- γ and functions as a transcriptional repressor, binding to the conserved X1 region within the X-box motif found in the promoter region of MHC class II genes. Acting as a potent repressor of MHC class II gene expression, NFX1 may be involved in regulating the duration of an inflammatory response. This suggests that NFX1 could be a useful target in the treatment of various diseases involving inflammation and autoimmunity. In addition, due to the presence of a RING-type zinc finger domain, NFX1 may also function as an E3 ubiquitin-protein ligase. Two NFX1 isoforms, namely NFX1-91 and NFX1-123, exist due to alternative splicing events and differ in their C-termini.

REFERENCES

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- Lisso, J., Altmann, T. and Müssig, C. 2006. The AtNFXL1 gene encodes a NF-X1 type zinc finger protein required for growth under salt stress. *FEBS Lett.* 580: 4851-4856.

CHROMOSOMAL LOCATION

Genetic locus: NFX1 (human) mapping to 9p13.3.

SOURCE

NFX1 (Y-14) is a mouse monoclonal antibody raised against recombinant NFX1 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NFX1 (Y-14) is recommended for detection of NFX1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NFX1 siRNA (h): sc-92717, NFX1 shRNA Plasmid (h): sc-92717-SH and NFX1 shRNA (h) Lentiviral Particles: sc-92717-V.

Molecular Weight of NFX1: 91 kDa.

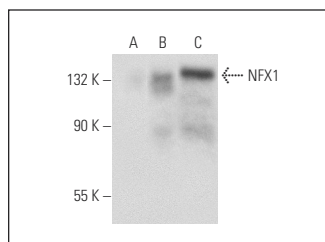
Molecular Weight of NFX1 isoforms: 123 kDa.

Positive Controls: NFX1 (h): 293T Lysate: sc-171830 or Hep G2 nuclear extract: sc-364819.

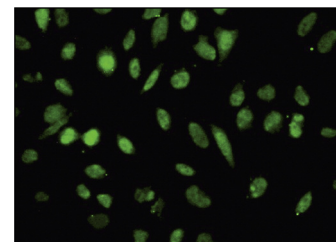
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



NFX1 (Y-14): sc-100973. Western blot analysis of NFX1 expression in non-transfected: sc-117752 (A) and human NFX1 transfected: sc-171830 (B) 293T whole cell lysates and HeLa nuclear extract (C).



NFX1 (Y-14): sc-100973. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear and cytoplasmic localization.

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 for detailed protocols and support products.