SANTA CRUZ BIOTECHNOLOGY, INC.

# NF90 (K-13)-R: sc-22531-R

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*The Power to Question*

## BACKGROUND

NF90 (nuclear factor of activated T cells 90 kDa), also known as NFAR, DRBF, DRBP76 (double-stranded RNA-binding protein 76), MPP4, MPHOSPH4 (M-phase phosphoprotein 4), ILF3 (interleukin-enhancer binding factor 3) or TCP80 (translational control protein 80), is a ubiquitously expressed nuclear protein that exists in a heterodimer with NF45. NF90 contains two DRBM (double-stranded RNA(dsRNA)-binding) domains and one DZF domain and, in association with NF45, primarily participates in the regulation of IL-2 expression by binding to the antigen receptor response element (ARRE) target sequence of the IL-2 enhancer. In neuronal cells, the NF45/NF90 heterodimer can repress human rhinovirus type 2 replication by binding to a 5' untranslated region of the viral RNA that encodes the internal ribosome entry site (IRES). NF45 and NF90 belong to the double-stranded RNA-binding protein family and both are substrates for the dsRNA-activated protein kinase PKR. Due to alternative splicing events, six isoforms exist for NF90, namely NFAR-2 (or ILF3-E), NFAR-1 (or DRBP76), isoform 3, DRBP76$\alpha$ (or ILF3-A), DRBP76$\delta$ (also known as DRBP76$\gamma$ or ILF3-C) and isoform 6.

## CHROMOSOMAL LOCATION

Genetic locus: ILF3 (human) mapping to 19p13.2; Ilf3 (mouse) mapping to 9 A3.

## SOURCE

NF90 (K-13)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping of NF90 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-22531 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NF90 (K-13)-R is recommended for detection of NF90 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

NF90 (K-13)-R is also recommended for detection of NF90 in additional species, including porcine.

Suitable for use as control antibody for NF90 siRNA (h): sc-106301, NF90 siRNA (m): sc-149941, NF90 shRNA Plasmid (h): sc-106301-SH, NF90 shRNA Plasmid (m): sc-149941-SH, NF90 shRNA (h) Lentiviral Particles: sc-106301-V and NF90 shRNA (m) Lentiviral Particles: sc-149941-V.

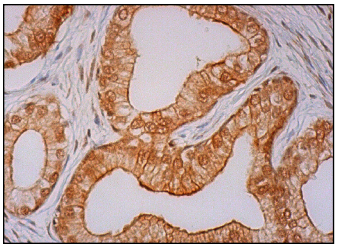
Molecular Weight of NF90 isoforms: 90/110/120 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



NF90 (K-13)-R: sc-22531-R. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing nuclear, cytoplasmic and membrane staining of glandular cells.

## 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.