

Nix (N-19): sc-5860

BACKGROUND

The adenovirus E1B protein is a viral homolog of the Bcl-2 family of proteins that are involved in regulating cell death. A family of interacting proteins, which are designated Nip or Bnip and include Nip1, Nip2, Nip3 and Nix, associate with both the E1B protein and Bcl-2 proteins to mediate apoptotic signaling. Nip1 contains a hydrophobic transmembrane domain, which enables its localization to the nuclear envelope, endoplasmic reticulum and mitochondria. Nip2 shares homology with the non-catalytic domain of Cdc42 GTPase-activating protein (Cdc42GAP). Through binding to Cdc42GAP, Nip2 enhances the GTPase activity of Cdc42GAP, facilitating the hydrolysis of GTP bound to Cdc42 and thereby, mediating the signaling pathways involving receptor kinases, small GTPases and apoptotic proteins. Nix, which is also designated Nip3L or Bnip3L, is highly related to Nip3, and both proteins localize to the mitochondria where they associate with Bcl-2 proteins. Nip3 preferentially binds to Bcl-x_L and induces apoptosis by suppressing the anti-apoptosis activity of Bcl-x_L.

CHROMOSOMAL LOCATION

Genetic locus: BNIP3L (human) mapping to 8p21.2; Bnip3l (mouse) mapping to 14 D1.

SOURCE

Nix (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Nix 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-5860 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Nix (N-19) is recommended for detection of Nix of mouse, rat and 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), 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).

Nix (N-19) is also recommended for detection of Nix in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Nix siRNA (h): sc-37453, Nix siRNA (m): sc-37454, Nix shRNA Plasmid (h): sc-37453-SH, Nix shRNA Plasmid (m): sc-37454-SH, Nix shRNA (h) Lentiviral Particles: sc-37453-V and Nix shRNA (m) Lentiviral Particles: sc-37454-V.

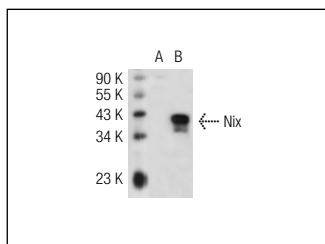
Molecular Weight of Nix: 48/24/11 kDa.

Positive Controls: Nix (h): 293T Lysate: sc-113558 or HeLa whole cell lysate: sc-2200.

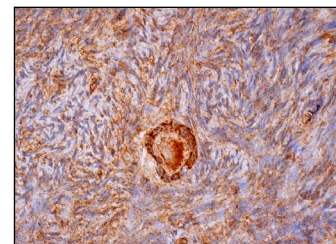
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Nix (N-19): sc-5860. Western blot analysis of Nix expression in non-transfected: sc-117752 (A) and human Nix transfected: sc-113558 (B) 293T whole cell lysates.



Nix (N-19): sc-5860. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic staining of follicle cells and ovarian stroma cells.

SELECT PRODUCT CITATIONS

- Bacon, A.L., et al. 2007. Selective silencing of the hypoxia-inducible factor 1 target gene BNIP3 by histone deacetylation and methylation in colorectal cancer. *Oncogene* 26: 132-141.

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.


 MONOS
Satisfaction
Guaranteed

Try **Nix (H-8): sc-166332** or **Nix (E-1): sc-166314**, our highly recommended monoclonal alternatives to Nix (N-19).