

Nix (FL-219): sc-28240

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 BNIP-1, BNIP-2, BNIP-3 and Nix, associate with both the E1B protein and Bcl-2 proteins to mediate apoptotic signaling. BNIP-1 contains a hydrophobic transmembrane domain, which enables its localization to the nuclear envelope, endoplasmic reticulum and mitochondria. BNIP-2, (previously designated Nip2 and Nip21 in human and mouse respectively), shares homology with the non-catalytic domain of Cdc42 GTPase-activating protein (Cdc42GAP). Through binding to Cdc42GAP, BNIP-2 enhances the GTPase activity of Cdc42GAP, facilitating the hydrolysis of GTP bound to Cdc42 and thereby, mediating the signaling pathways involving re-ceptor kinases, small GTPases and apoptotic proteins. Nix, which is also designated Nip3L or Bnip3L, is highly related to BNIP-3, and both proteins localize to the mitochondria where they associate with Bcl-2 proteins. BNIP-3 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, BNIP3 (human) mapping to 10q26.3; Bnip3l (mouse) mapping to 14 D1, Bnip3 (mouse) mapping to 7 F4.

SOURCE

Nix (FL-219) is a rabbit polyclonal antibody raised against amino acids 1-219 representing full length 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.

STORAGE

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

APPLICATIONS

Nix (FL-219) is recommended for detection of Nix of mouse, rat and human origin and, to a lesser extent, BNIP-3 of human and mouse 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 (FL-219) is also recommended for detection of Nix and, to a lesser extent, BNIP-3 in additional species, including equine and bovine.

Molecular Weight of Nix homodimer: 48 kDa.

Molecular Weight of Nix monomer: 24 kDa.

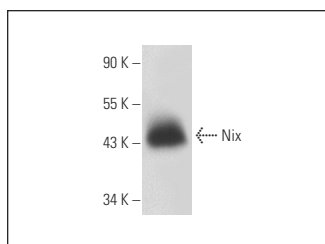
Molecular Weight of Nix C-terminal fragment: 11 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

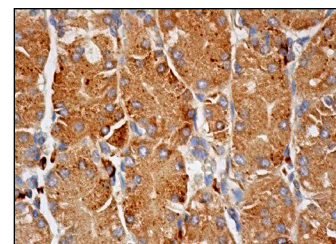
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Nix (FL-219): sc-28240. Western blot analysis of Nix expression in HeLa whole cell lysate.



Nix (FL-219): sc-28240. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Gubern, C., et al. 2013. miRNA expression is modulated over time after focal ischaemia: up-regulation of miR-347 promotes neuronal apoptosis. FEBS J. 280: 6233-6246.

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 (FL-219).