**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 NIP-1, BNP-2, BNP-3 and Nix, associate with both the E1B protein and Bcl-2 proteins to mediate apoptotic signaling. NIP-1 contains a hydrophobic transmembrane domain, which enables its localization to the nuclear envelope, endoplasmic reticulum and mitochondria. BNP-2, previously designated Nip2 and Nip21 in human and mouse respectively, shares homology with the non-catalytic domain of Cdc42 GAP. Through binding to Cdc42GAP, BNP-2 enhances the GAP 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 BNP-3, and both proteins localize to the mitochondria where they associate with Bcl-2 proteins. BNP-3 preferentially binds to Bcl-xL and induces apoptosis by suppressing the anti-apoptosis activity of Bcl-xL.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

Nix (B-1) is a mouse monoclonal antibody raised against amino acids 1-219 representing full length Nix of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Nix (B-1) is recommended for detection of Nix 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 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 homodimer**: 48 kDa.

**Molecular Weight of Nix monomer**: 24 kDa.

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

Positive Controls: LADMAC whole cell lysate: sc-364189, MCF7 whole cell lysate: sc-2206 or Nix (h): 293T Lysate: sc-113558.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

**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.