

## PRODUCT DATA SHEET



Bioworld Technology, Inc.

### BNIP-3 (E96) pAb

Cat No.: BS3545

Host: Rabbit

Reactivity: Human, Mouse, Rat

#### BACKGROUND

BNIP3, formerly NIP3 (nineteen kDa interacting protein-3), is a pro-apoptotic, mitochondrial protein classified in the Bcl 2 family based on limited sequence homology to the Bcl 2 homology 3 (BH3) domain (amino acids 110-118) and C-terminal TM domain. BNIP3 expressed in yeast and mammalian cells interacts with survival promoting proteins Bcl 2, Bcl XL, CED9 and the adenovirus E1B 19K protein. Typically the BH3 domain of pro-apoptotic Bcl-2 homologues mediates Bcl 2/Bcl XL heterodimerization and confers pro-apoptotic activity. BNIP3 represents a subfamily of Bcl 2 related proteins, which functions without a typical BH3 domain to regulate apoptosis from both mitochondrial and nonmitochondrial sites by selective Bcl 2/Bcl XL interactions. The N-terminus (residues 1-49) and the C-terminus TM domain of BNIP3 are critical for Bcl 2 heterodimerization, and either region is sufficient for Bcl XL interaction. The TM domain of BNIP3 is critical for homodimerization, pro-apoptotic function, and mitochondrial targeting. BNIP3 contains PEST sequences suggesting that the protein may be susceptible to rapid degradation by proteases. PEST sequences commonly contain high local concentrations of amino acids P, E, S, T, and D flanked by charged amino acids and these are abundantly present in NIP3. Thus, the posttranslational control of BNIP3 expression through rapid protein degradation may constitute a mechanism for regulating the intracellular levels of a potentially lethal protein.

#### PRODUCT

1 mg/ml in Phosphate buffered saline (PBS) with 0.05

#### PURIFICATION & PURITY

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

#### APPLICATIONS

IHC: 1:50 ~ 1:200 (Recommended Dilutions)

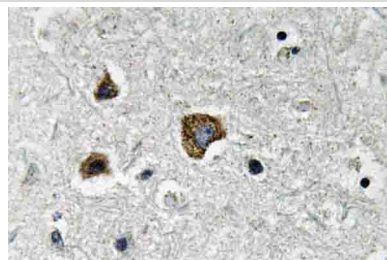
#### STORAGE & STABILITY

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

#### SPECIFICITY

BNIP-3 (E96) pAb detects endogenous levels of BNIP-3 protein.

#### DATA



**Immunohistochemistry (IHC)** analyzes of BNIP-3 (E96) pAb in paraffin-embedded human brain tissue.

#### RESEARCH USE

For research use only, not for use in diagnostic procedures.

Bioworld Technology, Inc.

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