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NIP1 Antibody (BH3 Domain Specific)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1315a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q12981
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1274
Calculated MW	26132
Antigen Region	92-127

Additional Information

Gene ID	662
Other Names	Vesicle transport protein SEC20, BCL2/adenovirus E1B 19 kDa protein-interacting protein 1, Transformation-related gene 8 protein, TRG-8, BNIP1, NIP1, SEC20L
Target/Specificity	This NIP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 92-127 amino acids from human NIP1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NIP1 Antibody (BH3 Domain Specific) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BNIP1
Synonyms	NIP1, SEC20L
Function	As part of a SNARE complex may be involved in endoplasmic reticulum membranes fusion and be required for the maintenance of endoplasmic

	reticulum organization (PubMed:15272311). Also plays a role in apoptosis (PubMed:15272311, PubMed:23896122, PubMed:7954800). It is for instance required for endoplasmic reticulum stress-induced apoptosis (PubMed:23896122). As a substrate of RNF185 interacting with SQSTM1, might also be involved in mitochondrial autophagy (Probable).
Cellular Location	Endoplasmic reticulum membrane; Single-pass type IV membrane protein. Mitochondrion membrane; Single-pass type IV membrane protein. Note=Localization to the mitochondrion is regulated by RNF186.
Tissue Location	Isoform 1 is highly expressed in heart, brain, liver skeletal muscle and pancreas. Isoform 3 is moderately expressed in placenta, lung and kidney. Isoform 4 is highly expressed in testis and small intestine.

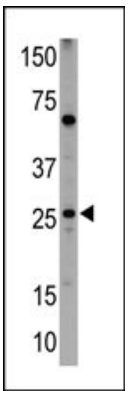
Background

NIP1 (BNIP1) is a member of the BCL2/adenovirus E1B 19 kd-interacting protein (BNIP) family. It interacts with the E1B 19 kDa protein which is responsible for the protection of virally-induced cell death, as well as E1B 19 kDa-like sequences of BCL2, also an apoptotic protector. Alternative splicing of this gene results in four products of unknown function. Transcript variant BNIP1 contains the entire coding region of the gene. This variant contains a fully conserved BH3 domain, which has been associated with pro-apoptotic function.

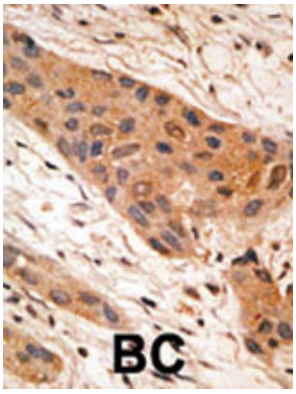
References

Zhang, H., et al., FEBS Lett. 448(1):23-27 (1999).
Boyd, J.M., et al., Cell 79(2):341-351 (1994).

Images



Western blot analysis of anti-NIP1 BH3 Domain Pab (Cat.# AP1335a) in HL60 cell lysates (35ug/lane). NIP1 BH3 Domain (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.