10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DFFB Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9841a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	O76075
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24419
Calculated MW	39110
Antigen Region	1-30

Additional Information

Gene ID	1677
Other Names	DNA fragmentation factor subunit beta, 3---, Caspase-activated deoxyribonuclease, CAD, Caspase-activated DNase, Caspase-activated nuclease, CPAN, DNA fragmentation factor 40 kDa subunit, DFF-40, DFFB, CAD, DFF2, DFF40
Target/Specificity	This DFFB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human DFFB.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	DFFB Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DFFB
Synonyms	CAD, DFF2, DFF40

Function	Nuclease that induces DNA fragmentation and chromatin condensation during apoptosis. Degrades naked DNA and induces apoptotic morphology.
Cellular Location	Cytoplasm. Nucleus.

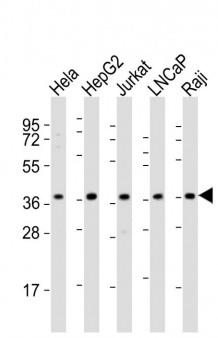
Background

Apoptosis is a cell death process that removes toxic and/or useless cells during mammalian development. The apoptotic process is accompanied by shrinkage and fragmentation of the cells and nuclei and degradation of the chromosomal DNA into nucleosomal units. DNA fragmentation factor (DFF) is a heterodimeric protein of 40-kD (DFFB) and 45-kD (DFFA) subunits. DFFA is the substrate for caspase-3 and triggers DNA fragmentation during apoptosis. DFF becomes activated when DFFA is cleaved by caspase-3. The cleaved fragments of DFFA dissociate from DFFB, the active component of DFF. DFFB has been found to trigger both DNA fragmentation and chromatin condensation during apoptosis.

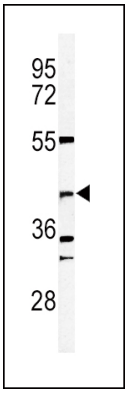
References

Hanus, J., et al. Apoptosis 13(3):377-382(2008)
Kalinowska-Herok, M., et al. Acta Biochim. Pol. 55(1):21-26(2008)
Neimanis, S., et al. J. Biol. Chem. 282(49):35821-35830(2007)
Hristoskova, S., et al. J. Cell. Physiol. 213(2):490-494(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007)

Images

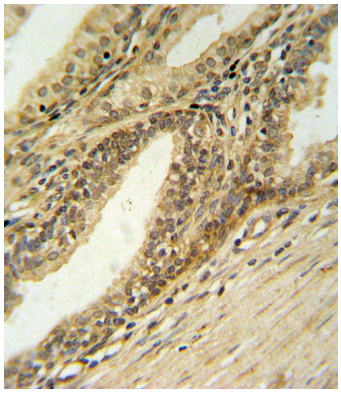


All lanes : Anti-DFFB Antibody (N-term) at 1:2000 dilution Lane 1: Hela whole cell lysates Lane 2: HepG2 whole cell lysates Lane 3: Jurkat whole cell lysates Lane 4: LNCaP whole cell lysates Lane 5: Raji whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

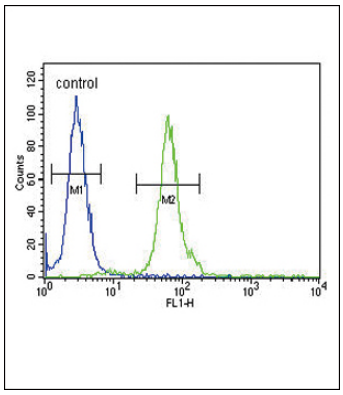


Western blot analysis of DFFB Antibody (N-term) (Cat. #AP9841a) in 293 cell line lysates (35ug/lane). DFFB (arrow) was detected using the purified Pab.

DFFB Antibody (N-term) (Cat. #AP9841a) IHC analysis in formalin fixed and paraffin embedded prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DFFB Antibody (N-term) for



immunohistochemistry. Clinical relevance has not been evaluated.



DFFB Antibody (N-term) (Cat. #AP9841a) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.