

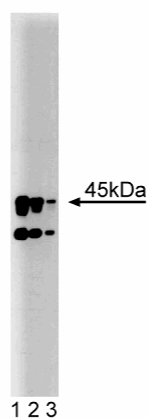
Technical Data Sheet

Purified Mouse Anti-Human DFF45**Product Information**

Material Number:	611036
Alternate Name:	DNA Fragmentation Factor-45
Size:	50 µg
Concentration:	250 µg/ml
Clone:	19/DFF45
Immunogen:	Human DFF45 aa. 105-305
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	45 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Apoptosis, a selective process of genetically programmed cell death, occurs during normal cellular differentiation and development of multicellular organisms. Apoptotic cells are characterized by loss of cell volume, plasma membrane blebbing, nuclear condensation, chromatin aggregation, and endonucleocytic degradation of DNA into nucleosomal fragments. Caspase-3 (CPP32, Yama, apopain) is the most extensively studied apoptotic protein. An apoptotic signal induces the intracellular cleavage of caspase-3 from an inactive proform to an active fragment. The active form of caspase-3 cleaves several other apoptotic proteins including DNA Fragmentation Factor (DFF). DFF is thought to be either directly or indirectly responsible for the DNA laddering that is a hallmark of apoptosis. It is a heterodimer of 40 kDa (DFF40) and 45 kDa (DFF45) subunits. Cleavage of DFF45 into three fragments is a prerequisite for DFF-mediated DNA fragmentation. Identity of the DFF fragment that mediates DNA laddering remains unclear. However, it is clear that DFF functions downstream of caspase-3 and is essential for the characteristic fragmentation of DNA during apoptosis.



Western blot analysis of DFF45 on a Jurkat cell lysate (Human T-cell leukemia; ATCC TIB-152). Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the mouse anti-human DFF45 antibody.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at -20° C.

Application Notes**Application**

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

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Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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