

For Research Use Only

# DFFA/DFF45 Monoclonal antibody, PBS Only (Capture/Detector)

Catalog Number: 68177-1-PBS



## Basic Information

<b>Catalog Number:</b> 68177-1-PBS	<b>GenBank Accession Number:</b> BC000037	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1676	<b>CloneNo.:</b> 1F6H9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O00273	
<b>Isotype:</b> IgG1	<b>Full Name:</b> DNA fragmentation factor, 45kDa, alpha polypeptide	
<b>Immunogen Catalog Number:</b> AG32657	<b>Calculated MW:</b> 37 kDa	
	<b>Observed MW:</b> 42 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, FC (Intra), Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Product Information

68177-1-PBS targets DFFA/DFF45 as part of a matched antibody pair:

MP50354-1: 68177-1-PBS capture and 68177-2-PBS detection (validated in Cytometric bead array)

MP50354-2: 68177-3-PBS capture and 68177-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

Apoptosis is accompanied by shrinkage and fragmentation of the cells and nuclei and degradation of the chromosomal DNA into nucleosomal units. DNA fragmentation factor (DFF), heterodimer of 40-kDa (DFFB) and 45-kDa (DFFA) subunits, is one of the major endonucleases responsible for internucleosomal DNA cleavage during apoptosis. DFFA is the substrate for caspase-3 and triggers DNA fragmentation during apoptosis. DFF activated after cleavage of DFFA by caspase-3 followed by its dissociation from DFFB. DFFB has been found to trigger both DNA fragmentation and chromatin condensation during apoptosis. DFFA appears to be a 45-kDa protein despite the predicated MW of 37 kDa.

## Storage

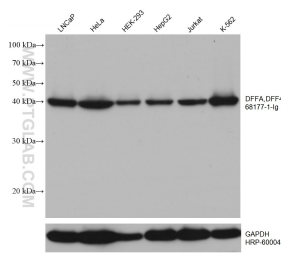
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

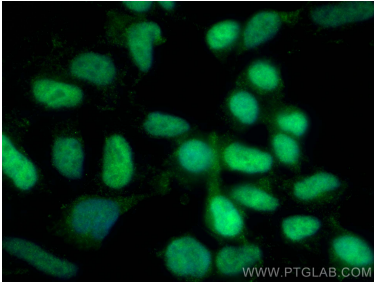
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

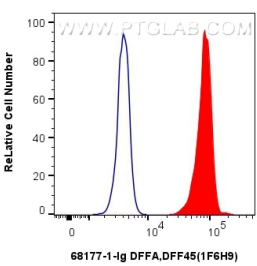
Selected Validation Data



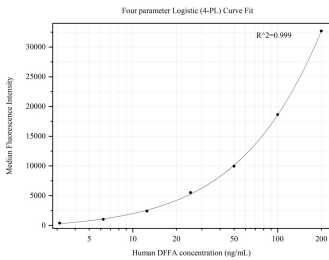
Various lysates were subjected to SDS PAGE followed by western blot with 68177-1-Ig (DFFA,DFF45 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control. This data was developed using the same antibody clone with 68177-1-PBS in a different storage buffer formulation.



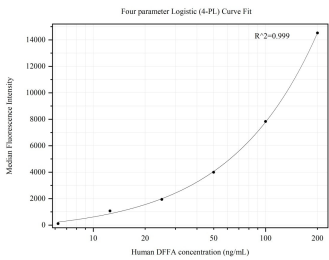
Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using DFFA,DFF45 antibody (68177-1-Ig, Clone: 1F6H9 ) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 68177-1-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.8 ug DFFA,DFF45 Monoclonal antibody (68177-1-Ig, Clone:1F6H9) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1)(red), or 0.8 ug Mouse IgG1 isotype control Mouse McAb (66360-1-Ig, Clone: 1F8D3) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 68177-1-PBS in a different storage



Cytometric bead array standard curve of MP50354-1, DFFA,DFF45 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68177-1-PBS. Detection antibody: 68177-2-PBS. Standard:Ag32657. Range: 3.125-200 ng/mL



Cytometric bead array standard curve of MP50354-2, DFFA,DFF45 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 68177-3-PBS. Detection antibody: 68177-1-PBS. Standard:Ag32657. Range: 6.25-200 ng/mL