For Research Use Only

DFFA/DFF45 Monoclonal antibody

Catalog Number:68177-1-Ig

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Basic Information

Catalog Number:
68177-1-Ig

Size:
150ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG32657

GenBank Accession Number:
BC000037

GeneID (NCBI):
1676

UNIPROT ID:
O00273

Full Name:
DNA fragmentation factor, 45kDa, alpha polypeptide

Calculated MW:
37 kDa

Observed MW:
42 kDa

Purification Method:
Protein G purification

CloneNo.:
1F6H9

Recommended Dilutions:
WB: 1:5000-1:50000
IF/ICC: 1:1000-1:4000
FC (Intra): 0.80 ug per 10^6 cells in a 100 µl suspension

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), ELISA

Species Specificity:
human, mouse, rat

Positive Controls:

WB : LNCaP cells, HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells

IF/ICC : HEK-293 cells,

FC (Intra) : HEK-293 cells,

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.

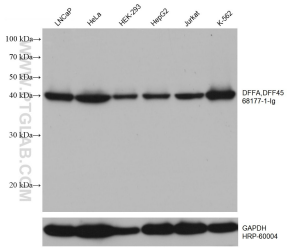
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

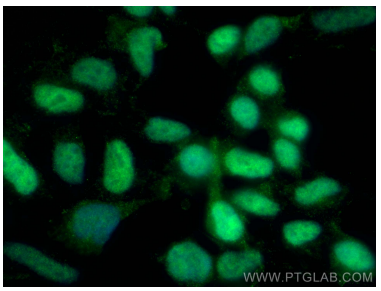
***** 20ul sizes contain 0.1% BSA**

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
W: ptglab.com

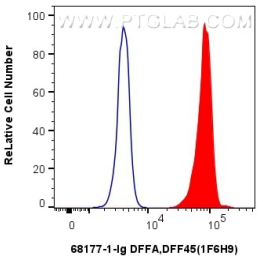
Selected Validation Data



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.



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).



1x10^6 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.