

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# **Product datasheet for TA500061**

## ICAD (DFFA) Mouse Monoclonal Antibody [Clone ID: OTI1B10]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1B10
Applications: IF, WB

**Recommend Dilution:** WB: 1:500, IF (1:100)

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Recombinant protein expressed in E.coli corresponding to amino acids 1-331 of human

DFF45

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 36.3 kDa

Gene Name: DNA fragmentation factor subunit alpha

Database Link: NP 004392 Entrez Gene 1676 Human

**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. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene

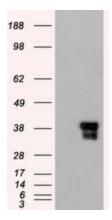
Synonyms: DFF-45; DFF1; ICAD

**Protein Pathways:** Apoptosis

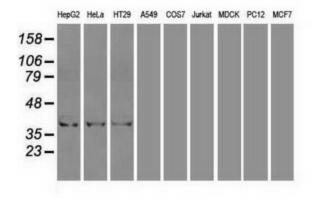




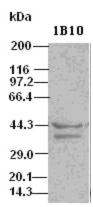
## **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY DFFA ([RC202879], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DFFA. Positive lysates [LY418008] (100ug) and [LC418008] (20ug) can be purchased separately from OriGene.

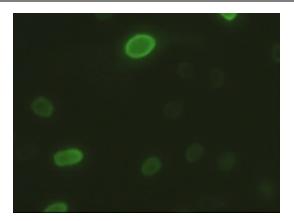


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-DFFA monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).

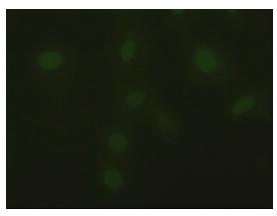


DFF45 antibody (1B10) at 1:500 dilution + Hela cell lysate





Anti-DFFA mouse monoclonal antibody (TA500061) immunofluorescent staining of HeLa cells transiently transfected by pCMV6-ENTRY DFFA ([RC202879])



Immunofluorescent staining of HeLa cells using anti-DFFA mouse monoclonal antibody (TA500061).