

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DFF45/ICAD in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 495403
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DFF45/ICAD Met1-Thr331 (predicted) Accession # O00273
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DFF45 (DNA fragmentation factor 45 kDa subunit, also known as ICAD) is a 45 kDa member of the CIDE domain-containing family of proteins. Human DFF45 is 331 amino acids (aa) in length. It contains an N-terminal CIDE domain (aa 17-96) plus two caspase-3 cleavage sites (aa's 117-118 and 224-225). DFF45 is a cytoplasmic protein that inhibits DFF40 DNAase. Normally, DFF45 and DFF40 form an enzymatically-inactive noncovalent heterodimer. Upon activation of the apoptotic cascade, DFF45 is cleaved into three fragments. These dissociate from DFF40 and induce DFF40 oligomerization and activation. Human DFF45 has two potential splice forms. One is truncated, and shows a seven aa substitution for aa 262-331; a second is extended, and shows a 45 aa substitution for the C-terminal five amino acids. Human DFF45 is 76% aa identical to mouse DFF45.

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