

# Recombinant human DFF45/ICAD protein

Catalog Number: ATGP0368

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

1-331aa

**UniProt No.**

O00273

**NCBI Accession No.**

AAH07721.1

**Alternative Names**

DNA fragmentation factor subunit alpha., FF-45, DFF1, ICAD, DNA fragmentation factor subunit alpha, A330085O09Rik, ICAD L, ICAD S, DFF 1, Caspase activated deoxyribonuclease inhibitor short form, DFF 45, DFF alpha, DFF35, DFF45, DFFA, Caspase-activated deoxyribonuclease inhibitor short form, Dffa DNA fragmentation factor, alpha subunit, DNA fragmentation factor 45 kDa subunit, DNA Fragmentation Factor Alpha Subunit, DNA fragmentation factor subunit alpha, DNA fragmentation factor, 45 kD, alpha subunit, DNA fragmentation factor, 45kDa, alpha polypeptide, DNA fragmentation factor, 45kDa, alpha polypeptide (DFFA), transcript variant 1, RP23 121D17.3, DNA fragmentation factor, alpha subunit, DNAation factor 45 kDa subunit, H13, Inhibitor of CAD, Inhibitor of Caspase Activated DNase, MGC143066, OTTHuMP00000001903, OTTHuMP00000001904,

## PRODUCT SPECIFICATION

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**Molecular Weight**

38.7 kDa (351aa) confirmed by MALDI-TOF

**Concentration**

1mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 1mM DTT

**Purity**

> 90% by SDS-PAGE

**Tag**

His-Tag

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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# Recombinant human DFF45/ICAD protein

Catalog Number: ATGP0368

## Description

DNA fragmentation factor (DFF) is a heterodimeric protein of 40-kD (DFFB) and 45-kD (DFFA) subunits. DFFA, also known as DNA fragmentation factor subunit alpha, 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. Recombinant DFFA protein was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

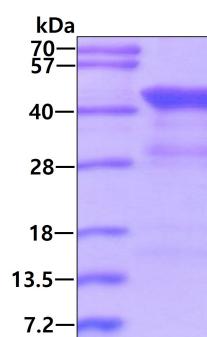
<MGSSHHHHHH SGLVPRGSH> MEVTGDAGVP ESGEIRTLKP CLLRRNYSRE QHGVAASCLE DLRSKACDIL  
AIDKSLTPVT LVLAEDGTIV DDDDYFLCLP SNTKFVALAS NEKWAYNNSD GGTAWISQES FDVDETDSGA GLKWKNVARQ  
LKEDLSSII LSEEDLQMLV DAPCSDLQAQE LRQSCATVQR LQHTLQQVLD QREEVRQSKQ LLQLYLQALE KEGSLLSKQE  
ESKAAGGEEV DAVDTGISRE TSSDVALASH ILTALREKQA PELSLSQDL ELVTKEDEPKA LAVALNWDIK KTETVQEACE  
WELALRLQQT QSLHSLRSIS ASKASPPGDL QNPKRARQDP T

## General References

- McCarty JS., et al. (1999) Biochem Biophys Res Commun. 264(1):176-80.  
Gu J., et al. (1999) J Biol Chem. 274(30):20759-62.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.