



Recombinant Mouse DNA fragmentation factor subunit alpha (Dffa)

Product Code	CSB-EP006737MO
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	O54786
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	>85% (SDS-PAGE)
Sequence	MELSRGASAP DPDDVRPLKP CLLRRNHSRD QHGVAASSLE ELRSKACELL AIDKSLTPIT LVLAEDGTIV DDDDYFLCLP SNTKFVALAC NEKWIYNDSD GGTAWVSQES FEADEPDSRA GVKWKNVARQ LKEDLSSIIL LSEEDLQALI DIPCAELAQE LCQSCATVQG LQSTLQQVLD QREEARQSKQ LLELYLQALE KEGNILSNQK ESKAALSEEL DAVDTGVGRE MASEVLLRSQ ILTTLKEKPA PELSLSSQDL ESVSKEDPKA LAVALSWDIR KAETVQQACT TELALRLQQV QSLHSLRNL ARRSPPLGEP QRPKRAKRDS S
Source	E.coli
Target Names	Dffa
Protein Names	Recommended name: DNA fragmentation factor subunit alpha Alternative name(s): DNA fragmentation factor 45 kDa subunit Short name= DFF-45 Inhibitor of CAD Short name= ICAD
Expression Region	1-331
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full length protein
Target Details	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.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.