Recombinant Bovine Flap endonuclease 1 (FEN1)

Product Code	CSB-EP688354BO-B
Abbreviation	FEN1
Storage	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.
Uniprot No.	Q58DH8
Product Type	Recombinant Protein
Immunogen Species	Bos taurus (Bovine)
Purity	>85% (SDS-PAGE)
Sequence	MGIQGLAKLI ADVAPSAIRE NDIKSYFGRK VAIDASMSIY QFLIAVRQGG DVLQNEEGET TSHLMGMFYR TIRMMENGIK PVYVFDGKPP QLKSGELAKR SERRAEAEKQ LQEAQAAGAE AEVEKFTKRL VKVTKQHNDE CKHLLSLMGI PYLDAPSEAE ASCAALVKAG KVYAAATEDM DCLTFGSPVL MRHLTASEAK KLPIQEFHLS RILQELGLNQ EQFVDLCILL GSDYCESIRG IGPKRAVDLI QKHKSIEEIV RRLDPNKYPV PENWLHKEAQ QLFLEPEVLD PESVELKWSE PNEEELIKFM CGEKQFSEER IRSGVRRLSK SRQGSTQGRL DDFFKVTGSL SSAKRKEPEP KGAAKKKAKT GAAGKFKRGK
Source	E.coli
Target Names	FEN1
Protein Names	Recommended name: Flap endonuclease 1 Short name= FEN-1 EC= 3.1.-.- Alternative name(s): Flap structure-specific endonuclease 1
Expression Region	1-380
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	This protein removes 5 overhanging flaps in DNA repair and processes the 5 ends of Okazaki fragments in lagging strand DNA synthesis. Direct physical interaction between this protein and AP endonuclease 1 during long-patch base excision repair provides coordinated loading of the proteins onto the substrate, thus passing the substrate from one enzyme to another. The protein is a member of the XPG/RAD2 endonuclease family and is one of ten proteins essential for cell-free DNA replication. DNA secondary structure can inhibit flap processing at certain trinucleotide repeats in a length-dependent manner by concealing the 5 end of the flap that is necessary for both binding and cleavage by This protein. Therefore, secondary structure can deter the protective function of this protein, leading to site-specific trinucleotide expansions.
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.