

SMUG1, 1-270aa, Human, His tag, E.coli

Cat.NO.: TP03972

3th Edition

Synonyms:Single-strand-selective monofunctional uracil-DNA glycosylase, FDG, HMUDG, UNG3

Description:Single-strand-selective monofunctional uracil-DNA glycosylase, also known as SMUG1, is a enzyme responsible for recognizing base lesions in the genome and initiating base excision DNA repair. This protein acts as a monofunctional DNA glycosylase specific for uracil (U) residues in DNA and has a preference for single-stranded DNA substrates. Recombinant human SMUG1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

Form:Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 30% glycerol, 1mM DTT

Molecular Weight:32.3 kDa (293aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSMPPQAFLLGSIHEPAGALMEPQPCPGSLAESFLEEELRLNAELSQLQFSEPVG
IIYNPVEYAWEPHRNYVTRYCQGPKEVLFLGMNPGPFGMAQTGVPFGEVSMVRDWLGIVGPVLTTPQEHPKRPVL
GLECPQSEVSGARFWGFFRNLCGQPEVFFHHCFVHNLCPDLLFLAPSGRNLTPAELPAKQREQLLGICDAALCRQV
QLLGVRLVVGVRGLAEQRARRALAGLMPEVQVEGLLHPSRNPQANKGWEAVAKERLNELGLLPLLLK

Purity:> 95% by HPLC

Concentration:0.5 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.