

Product information



SMUG1, 1-270aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1848

Full name: Single-strand-selective monofunctional uracil-DNA glycosylase

NCBI Accession No.: NP_055126

Synonyms: FDG, HMUDG, UNG3

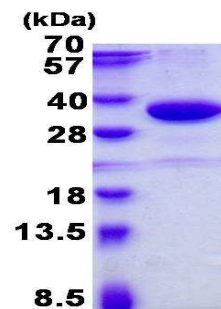
Description: Single-strand-selective monofunctional uracil-DNA glycosylase, also known as SMUG1, is a enzyme responsible for recognizing base lesions in the genome and initiating base excision DNA repair. This protein acts as a monofunctional DNA glycosylase specific for uracil (U) residues in DNA and 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

Purity: > 95% by SDS - PAGE

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



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSMPQAFLL GSIHEPAGAL MEPQPCPGSL AESFLEEELR LNAELSQLQF SEPVGI IYNP VEYAWEPHRN
YVTRYCQGPK EVLFLGMNPG PFGMAQTGVP FGEVSMVRDW LGIVGPVLTP PQEHPKRPVL GLECPQSEVS GARFWGFFRN LCGQPEVFFH
HCFVHNLCP LFLAPSGRNL TPAELPAKQR EQLLGICDAA LCRQVQLLGV RLVVGVGRLA EQRARRALAG LMPEVQVEGL LHPSRNPQA
NKGWEAVAKE RLNELGLLPL LLK

General references:

Masaoka A., *et al.* (2003) *Biochemistry*. 42:5003-5012

Boorstein R.J., *et al.* (2001) *J. Biol. Chem.* 276:41991-41997

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.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



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