

9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

## 32-2813: SMUG1 Recombinant Protein

Alternative Name: Single-strand selective monofunctional uracil DNA glycosylase, SMUG1, FDG, UNG3, HMUDG.

## **Description**

Source: E.coli. SMUG1 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 293 amino acids (1-270) and having a molecular mass of 32.3kDa.SMUG1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Single-strand-selective monofunctional uracil-DNA glycosylase (SMUG1) is an enzyme responsible for recognizing base lesions in the genome and initiating base excision DNA repair. SMUG1 participates in base excision repair by removing uracil from single- and double-stranded DNA. SMUG1 serves as a monofunctional DNA glycosylase specific for uracil (U) residues in DNA and has inclination for single-stranded DNA substrates. SMUG1 activity is greater against mismatches (U/G) than against matches (U/A).

## **Product Info**

Amount: 20 µg

**Purification:** Greater than 95% as determined by SDS-PAGE.

The SMUG1 solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.2M NaCl, 30% glycerol Content:

and 1mM DTT.

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of Storage condition:

time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid

multiple freeze-thaw cycles.

**Amino Acid:** MGSSHHHHHH SSGLVPRGSH MGSMPQAFLL GSIHEPAGAL MEPQPCPGSL AESFLEEELR

> LNAELSQLQF SEPVGIIYNP VEYAWEPHRN YVTRYCQGPK EVLFLGMNPG PFGMAQTGVP FGEVSMVRDW LGIVGPVLTP PQEHPKRPVL GLECPQSEVS GARFWGFFRN LCGQPEVFFH HCFVHNLCPL LFLAPSGRNL TPAELPAKQR EQLLGICDAA LCRQVQLLGV RLVVGVGRLA

EQRARRALAG LMPEVQVEGL LHPSPRNPQA NKGWEAVAKE RLNELGLLPL LLK.

