

Product datasheet for TP503761

OriGene Technologies, Inc.

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Smug1 (NM_027885) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse single-strand selective monofunctional uracil DNA

glycosylase (Smug1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone >MR203761 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MAASQTFPLGPTHEPASALMEPLPCTRSLAEGFLEEELRLNAELSQLQFPEPVGVIYNPVDYAWEPHRNY VTRYCQGPKEVLFLGMNPGPFGMAQTGVPFGEVNVVRDWLGVGGPVLTPPQEHPKRPVLGLECPQSEV

SG

ARFWGFFRTLCGQPQVFFRHCFVHNLCPLLFLAPSGRNLTPAELPAKQREQLLSICDAALCRQVQLLGVR LVVGVGRLAEQRARRALAGLTPEVQVEGLLHPSPRSAQANKGWEAAARERLQELGLLPLLTDEGSARPT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 30.7 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 082161

 Locus ID:
 71726

 UniProt ID:
 Q6P5C5





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RefSeq Size: 3611 Cytogenetics: 15 F3 RefSeq ORF: 837

Synonyms: 1200013B09Rik; A930006H09Rik; C85220

Summary: Recognizes base lesions in the genome and initiates base excision DNA repair. Acts as a

monofunctional DNA glycosylase specific for uracil (U) residues in DNA with a preference for single-stranded DNA substrates. The activity is greater toward mismatches (U/G) compared to matches (U/A). Excises uracil (U), 5-formyluracil (fU) and uracil derivatives bearing an oxidized group at C5 [5-hydroxyuracil (hoU) and 5-hydroxymethyluracil (hmU)] in ssDNA and dsDNA, but not analogous cytosine derivatives (5-hydroxycytosine and 5-formylcytosine), nor other oxidized bases. The activity is damage-specific and salt-dependent. The substrate preference is the following: ssDNA > dsDNA (G pair) = dsDNA (A pair) at low salt concentration, and dsDNA (G pair) > ssDNA at high salt concentration. [UniProtKB/Swiss-Prot

Function]