

Product datasheet for **MC205251**

Smug1 (NM_027885) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Smug1 (NM_027885) Mouse Untagged Clone
Tag: Tag Free
Symbol: Smug1
Synonyms: 1200013B09Rik; A930006H09Rik; C85220
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC062960
GGAGCTTGTGCAGGGACTTGCAAAGCAAAGGTCCCAGAAAACCCAGTTCGCCACACCGTCCCTCAGCTTTC
CAGAATGTTCTGGGAGCCCGTGTGGACAAACCAGATTTCTAGCCTGCTATGGTGACACATCCAGGTAATC
CCAGCACTCGGGAGACTGAGGCAGGAAGAAGGCCACTGGTTGGAGCCAAAATGCCAGGCAGTTCATTGTT
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AGTCCGAGGCCGCTTCAGCTACATATTGAGTTCAAGGCCAGCTTGAACACATTAGTCTCTGTCTCAAA
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TGTAATAAATAAATAAACAAACACAGTGTTCCTCCCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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- Restriction Sites:** Ascl-NotI
- ACCN:** NM_027885
- Insert Size:** 840 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
- RefSeq:** [BC062960](#), [AAH62960](#)
- RefSeq Size:** 3635 bp
- RefSeq ORF:** 840 bp

Locus ID: 71726

UniProt ID: [Q6P5C5](#)

Cytogenetics: 15 F3

Gene 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) > dsDNA (A pair) > ssDNA at high salt concentration.[UniProtKB/Swiss-Prot Function]