

## Product datasheet for RC231977

### SMUG1 (NM\_001243789) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SMUG1 (NM\_001243789) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SMUG1  
**Synonyms:** FDG; HMUDG; UNG3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC231977 representing NM\_001243789  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCCCAGGCTTTCCTGCTGGGTCCATCCATGAGCCTGCAGGTGCCCTCATGGAGCCCCAGCCCTGCC  
 CTGGAAGCTTGGCTGAGAGCTTCTGGAGGAGGAGCTTCGGCTCAATGCTGAGCTGAGCCAGCTGCAGTT  
 TTCGGAGCCTGTGGGCATCATCTACAATCCCGTGGAGTATGCATGGGAGCCACATCGCAACTACGTGACT  
 CGCTACTGCCAGGGCCCCAAGGAAGTACTTCTCTGGGCATGAACCCTGGACCTTTTGGCATGGCCAGA  
 CTGGGGTGCCCTTTGGGGAAGTAAGCATGGTCCGGGACTGGTTGGGCATTGTGGGCCTGTGCTGACCCC  
 TCCCAAGAGCATCCTAAACGACAGTGTGGGACTGGAGTGCCACAGTCAGAAGGACCAAGACAAAGC  
 ATGGGACATGAAATTAAGAGTGAAGTCTTATGGGAGGCTGCAGCTGGATCAGAGGAAAAATCCAGTGTG  
 ACAGAGTGAAGTCAGAAGACCTGGCTTTTCATCCCAGCTT

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC231977 representing NM\_001243789  
 Red=Cloning site Green=Tags(s)

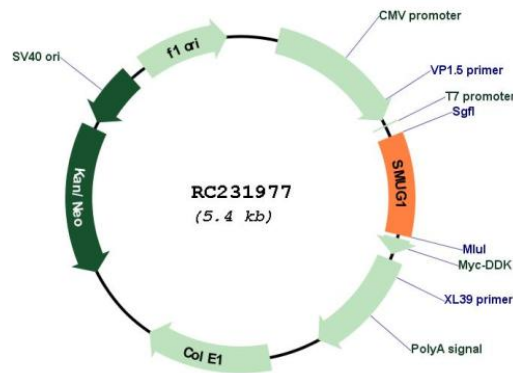
MPQAFLLGSIHEPAGALMEPQPCPGSLAESFLEEELRLNAELSQLQFSEPVGIIYNPVEYAWEPHRNYVT  
 RYCQGPKEVFLGMNPGPFGMAQTGVPFGEVSMVRDWLGIVGPVLTTPQEHPKRPVGLGECQSEGPQRQ  
 MGHEIKSELLMGGCSWIRGKIQCDRVQVRRPFGFSSQL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001243789

**ORF Size:** 531 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001243789.2</a>
<b>RefSeq Size:</b>	1046 bp
<b>RefSeq ORF:</b>	534 bp
<b>Locus ID:</b>	23583
<b>UniProt ID:</b>	<a href="#">Q53HV7</a>
<b>Cytogenetics:</b>	12q13.13
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Base excision repair
<b>MW:</b>	20.1 kDa
<b>Gene Summary:</b>	This gene encodes a protein that participates in base excision repair by removing uracil from single- and double-stranded DNA. Many alternatively spliced transcript variants exist for this gene; the full-length nature is known for some but not all of the variants. [provided by RefSeq, Aug 2011]