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Product datasheet for RG233603

SMUG1 (NM_001243788) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SMUG1 (NM_001243788) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SMUG1
Synonyms:	FDG; HMUDG; UNG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG233603 representing NM_001243788
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCCAGGCTTTCCTGCTGGGGTCCATCCATGAGCCTGCAGGTGCCCTCATGGAGCCCCAGCCCTGCC
CTGGAAGCTTGGCTGAGAGCTTCCTGGAGGAGGAGCTTCGGCTCAATGCTGAGCTGAGCCAGCTGCAGTT
TTCGGAGCCTGTGGGCATCATCTACAATCCCGTGGAGTATGCATGGGAGCCACATCGCAACTACGTGACT
CGCTACTGCCAGGGCCCCAAGGAAGTACTCTTCCTGGGCATGAACCCTGGACCTTTTGGCATGGCCCAGA
CTGGGGTGCCCTTTGGGGAAGTAAGCATGGTCCGGGACTGGTTGGGCATTGTGGGGCCTGTGCTGACCCC
TCCCCAAGAGCATCCTAAACGACCAGTGCTGGGACTGGAGTGCCCACAGTCAGAAGTGAGTGGTGCCCGA
TTCTGGGGCTTTTTCCGGAACCTCTGTGGACAGCCTGAGGTCTTCTTCCATCACTGTTTTGTCCACAATC
TATGCCCTCTGCTTTTCCTGGCTCCCAGCGGGCGCAACCTTACTCCTGCTGAGCTGCCTGCCAAGCAGCG
AGAACAGCTTCTTGGGATCTGTGATGCAGCCCTCTGCCGGCAGGTGCAGCTGCTGGGGGTGCGGCTGGTG
GTGGGAGTTGGGCGACTGGCAGAGCAGCGGGCACGACGGGCTCTGGCAGGCCTGATGCCAGAGGTCCAGG
TGGAAGGGCTCCTGCATCCCTCTCCCCGTAACCCACAGGCCAACAAGGGCTGGGAGGCAGTGGCCAAGGA
AAGATTGAATGAGCTGGGGCTGCTGCCACTGCTGTTGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

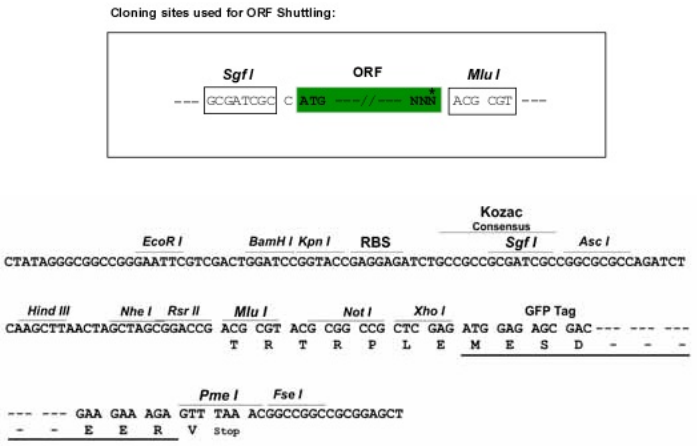
>RG233603 representing NM_001243788
Red=Cloning site Green=Tags(s)

MPQAFLLGSIHEPAGALMEPQPCPGSLAESFLEEELRLNAELSQLQFSEPVGIIYNPVEYAWEPHRNYVT
RYCQGPKEVLFLGMNPGPFGMAQTGVPFGEVSMVRDWLGIVGPVLTPPQEHPKRPVLGLECPQSEVSGAR
FWGFFRNLCGQPEVFFHHCFVHNLCPLLFLAPSGRNLTPAELPAKQREQLLGICDAALCRQVQLLGVRLV
VGVGRLAEQRARRALAGLMPEVQVEGLLHPSPRNPQANKGWEAVAKERLNELGLLPLLLK

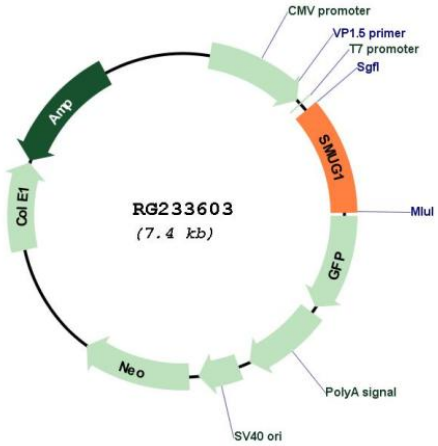
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001243788

ORF Size: 810 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.
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:	NM_001243788.1, NP_001230717.1
RefSeq Size:	2632 bp
RefSeq ORF:	813 bp
Locus ID:	23583
UniProt ID:	Q53HV7
Cytogenetics:	12q13.13
Protein Families:	Druggable Genome
Protein Pathways:	Base excision repair
Gene Summary:	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]