

Product datasheet for **MG223777**

Smg7 (NM_001160256) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smg7 (NM_001160256) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smg7
Synonyms:	9430023P16Rik; mKIAA0250
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG223777 representing NM_001160256 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCCTGCAGAGCGCGCAGTATCTCCGGCAGGCAGAAAGTCTGAAGGCTGAAATGACAGATTCTAAGC
TGGGTCCGGCTGAGGTCTGGACATCCAGGCAAGCTCTGCAGGACTTGACCAGAAAATGCTAGTTACTGA
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ACACTGCAAGGCCAAGCCAAGAATCGAGCAAACCCAAATCGAAGTGAAGTCCAGGCAAACCTTTCTCTGT
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GCCATGCCGTGTGAAGTCTCCAGTTGGGAATTATTAGCAATAAACAGACGCACAGCAGCACCATAGTG
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TTAATACTAGAAGACCCAGTGAAGCCAAAGAGAACCTCATCCTACAAGAAACATCTGTGGTAGAGTCAC
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

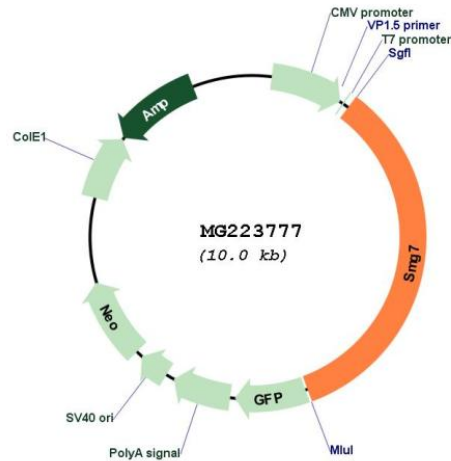
Protein Sequence:

>MG223777 representing NM_001160256
 Red=Cloning site Green=Tags(s)

MSLQSAQYLRAEVLKAEMTDSKLGPAEVWTSRQALQDL YQKML VTDLEYALDKKVEQDLWNHAFKNQIT
 TLQGQAKNRANPNRSEVQANLSLFL EAAAGFYTQLLQELCTVFNVDLPCR VKSSQLGIISNKQTHSSTIV
 KPQSSSCSYICQHCLVHLGDIARYRNQTSQAESYRHAALVPSNGQPYNQLAILASSKGDHLTTIFYC
 RSI AVKFPFPAASTNLQKALSKALESRDELKTKWGVSDFIKAFIKFHGHVYLSKSLEKLSPLREKLEEQF
 KRLLFQKAFNSQQLVHVTVINLFLHHLRDFSNETE QHSYSQDEQLCWTQLLALFMSFLGILCKCPLQND
 SQESNNAYPLPAVKVSMDWLRLRPRVFQEA VVDERQYIWPWLSILLNSFHPREDDL SNTNATPLPEEFEL
 QGFLALRPSFRNLDLDFSKGHQGITGDKGQRRIRQRLISIGKWIADNQPRLIQCENEVKGKLLFITEIPE
 LILEDPSEAKENLILQETSVVESLATD GSPGLKSVLSTGRNPSNSCDSGEEKPVVTFKENIKPREVNQGRS
 FPPKEVKSQTELKTPVSEARKTPVTQTPS QTSNSQFIPIHHPGAFPPPLPSRPGFPPPTVYIPPPVAFSM
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 QPTAQSTSQLQVQALAQQQSPTKVIPALGKSPPHSGFQQYQQADASKQLWNPPQVQSPLGKIMPVKQS
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 MDRRSKRSPGVFRPEQDPVPRMPFEDPKSSPLLPPDLLKSLAAL EEEEEELIFSNPPDLYPALLGPLASLP
 GRSLFKSLLEKPS ELMSSHSSFLSLTGFSVNQERYPNSSMFNEVYGKNTTSSKAELNPSVASQETSLYS
 LFEGTPWSPSLPASSDHSTPASQSPHSSNPSSLSPSPPTHNHNSAPFSNFGPIGTPDNRDRR PADRWKTD
 KPAMGGFGVDYLSATSSSESSWHQASTPSGTWTGHGPSMEDSSAVLMESLKSISWSSMMHPGPSALEQLL
 MQQKQKQQRGQGANPPH

TRTRPLE – GFP Tag – V

Plasmid Map:



ACCN: NM_001160256

ORF Size: 3414 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_001160256.1](#), [NP_001153728.1](#)

RefSeq Size: 5867 bp

RefSeq ORF: 3417 bp

Locus ID: 226517

UniProt ID: [Q5RIH6](#)

Cytogenetics: 1 G3

Gene Summary:

Plays a role in nonsense-mediated mRNA decay. Recruits UPF1 to cytoplasmic mRNA decay bodies. Together with SMG5 is thought to provide a link to the mRNA degradation machinery involving exonucleolytic pathways, and to serve as an adapter for UPF1 to protein phosphatase 2A (PP2A), thereby triggering UPF1 dephosphorylation (By similarity). [UniProtKB/Swiss-Prot Function]