

Product datasheet for **RG213908**

Smoothelin (SMTN) (NM_134270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Smoothelin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG213908 representing NM_134270
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCGGACGAGGCCTTAGCTGGGCTGGATGAGGGAGCCCTTCGGAAGCTGCTGGAGGTCACAGCAGATC
 TGGCAGAGCGGCGGCATCCGCTCAGCCATCCGGAACTGCAGCGGCAGGAGCTGGAGCGCAGGAGGA
 GGCCCTGGCATCCAAGCGTTTCCGTGCCGAGCGGCAGGACAACAAGGAGAACTGGTGCACTCTCAGCAG
 CGGGAAGCTGAGCAGCGGGCTGCCCTGGCAGGCTGGCAGGCGAGCTGGAGTCCATGAACGATGTGGAGG
 AATTGACTGCACTGTTGCGAAGCGCTGGTGAATGAGGAGCGCAAGCTGATCCGAGCTGCCATCCGCCG
 TGTACGGGCTCAGGAGATTGAGGCTGCCACCTTGCTGGGAGGTTGTACAGCGGGCGTCCCAACAGTGGC
 TCAAGAGAGACAGCAAGGGGCTAGCGGCACACAGGCTGGAACAGTGTGAGGTGCCAGAGCGAGAGGAAC
 AGGAACAGCAGGCAGAGGTTTCAAAGCCAACCCCAACCCCTGAAGGCACAGCCAGGATGTGACCACAGT
 GACACTCTGCTGCGAGCCCCACCTGGGAGCACATCCAGCTCACCTGCCCTACCCAGCAGTTACCCACC
 CCTGCCTCTCTGAGCCTCCATTGGAGCCTGCCGAGGCCAGTGCCTTACAGCTGAGGTTCCAGGCAGCC
 CAGAGCCACCCCCAGCCACCAAGACCACAGCCCTGAGCCTCAGGAGTCTCCAACGCTCCCCAGCAC
 TGAGGGCCAGGTGGTCAACAAGCTTCTGCTGGCCCCAAGAGACCCCTGCTGCCAGAGCCCCACAGA
 GGCCCCCTTGACACCAAGAGCAGACGTGGCTGGACCCGACCCCTGCCAACGCTCCCTGTCGGTGCTCA
 GCCCCGCGCAACCAGCCAGAACCGAGAGTCCACCCCTTGCCAGCGGACCTTCTCATTCCAGCGGGC
 TGGCTCTGTGCGGGATCGTGTCCACAAGTTCACATCTGATTCTCCTATGGCTGTAGGCTCCAGGATGGC
 ACACCCAGGCTGCCCTAAGTCCCCTGACCCCGCAAGGCTCCTGGGCCCTCCCTCACCAGCACCCACC
 CTGCCCTCTCTCAGCGGCTCCTCTCTCGGGCCCCAGTGATACCTCCTCCCGTTTCAGCAAGGAGCA
 ACGAGGAGTAGCCAGCCCTGGCCAGCTTCGAAGCTGCCCCAGGAGGAGGGCCCCAGGGGGCGGGGC
 TTGGCTGTAGGCCCTTGAAAACAGAGCAGGGGGGCTGTGGCACGTTTCAGAGGAGCCTGGTGCCCCGC
 TGCCCGTGGCCGTGCGCACTGCCGAGCCAGGGGCGAGTATGAAGACCACATTCACCATCGAGATCAAGGA
 CGGCCGTGGCCAGGCCTCCACAGGCCGGTGCTGCTGCCACAGGAACAGAGGGCAGAACTGACACTG
 GGGCTGCGGGCGCCCCGACCTACTCAGCACCAGTAGTGGGGGCAAGAGCACCATCACCCGTGTCAACA
 GCCCTGGGACCTGGCTCGGCTGGGCGAGTGTCACTCATGTACCAGCTTCAGCCATGCCCCCCCAGTAG
 CCGAGGAGGCTGCAGCATCAAGATGGAAGCAGAGCCAGCAGAGCCTCTCGCTGCAGCAGTGAAGCGGCC
 AATGGGGCTGAGCAGACCCGAGTGAACAAAGCACCAGAAAGGCGGAGCCCTCTGAGCGCTGAGGAGCTGA
 TGACTATTGAGGATGAAGGAGTCTTGACAAGATGCTGGATCAGAGCACGGACTTTGAAGAGCGGAAGCT
 CATCCGGGCTGCACTTCGTGAGCTCCGACAAAGGAAGAGAGACCAGCGGACAAAGGAGCGGGAACGGCGG
 CTGCAAGGAGCACGGGGCGGCCAGGGGAGGGGCGGCAACACAGCCACTGAGACCACACGAGGCACA
 GCCAGCGGGCAGCTGATGGCTCTGCTGTCAGCACTGTTACCAAGACTGAGCGGCTCGTCCACTCCAATGA
 TGGCACACGAGCGGCCCGCACCACACAGTGGAGTCGAGTTTCGTGAGGCGCTCGGAGAATGGCAGTGGC
 AGCACCATGATGCAACCAAGACCTTCTCCTCTCCTCATCCAAGAAGATGGGCAGCATCTTCGACC
 GCGAGGACCAGGCCAGCCACGGCCGGCAGCCTGGCGGCGCTCGAGAAACGGCAGGCCGAGAAGAAGAA
 AGAGCTGATGAAGGCGCAGAGTCTGCCAAGACCTCAGCCTCCAGGCGCGCAAGGCCATGATTGAGAAG
 CTGGAGAAGGAGGGCGCGGCCGAGCCCTGGCGGACCCCGCGCAGCCGTGCAGCGATCCACCAGCTTCG
 GGGTCCCCAACGCCAACAGCATCAAGCAGATGCTGCTGGAAGTGGTGTGAGCCAAGACTCGCGGCTACGA
 GCACGTCGACATCCAGAATCTCTCTCAGCTGGAGTGTGGGATGGCCTTCTGTGCCCTGGTGACAAC
 TTCTTCCCTGAGGCCTTCGACTATGGGAGCTTAGCCCTCAGAACCGACGCCAGAATTCGAGGTGGCCT
 TCTCATCTGCGGAGACCATGCGGACTGCCCGCAGCTCCTGGATACAGAGGACATGGTGCGGCTTCGAGA
 GCCTGACTGGAAGATGCTGGTGGAGTGTGTGCCCTGGTGGAGGTGGACGACATGATGATCATGGCAAG
 AAGCCTGACCCCAAGTGTGTCTTACCTATGTGCACTGCTCTACAACCACCTGCGACGCCACGAAGTGC
 GCCTGCGGCAAGAATGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG213908 representing NM_134270

Red=Cloning site Green=Tags(s)

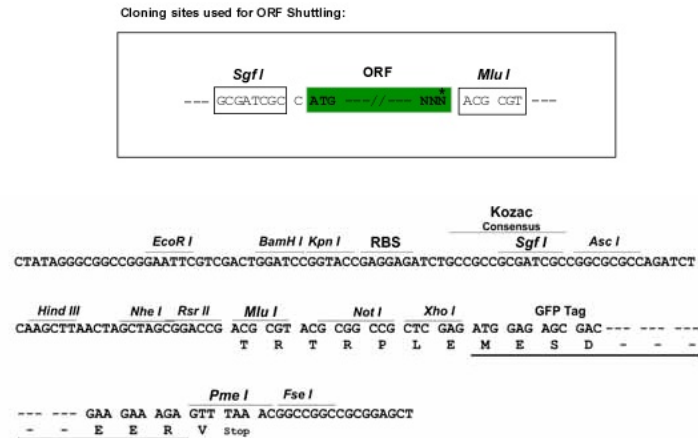
MADEALAGLDEGALRKLLLEVADLAERRRIRSAIRELQRQELEREEALASKRFRAERQDNKENWLHSQQ
REAEQRAALARLAGQLESMNDVEELTALLRSAGEYEERKLIRAAIRRVRAQEIEAATLAGRLYSGRPNSG
SREDSKGLAAHRLQCEVPEREEQEQAQEVSKPTPTPEGTSQDVTTVTLRLRAPPGSTSSSPASSSPT
PASPEPPLEPAEAQCLTAEVPGSPEPPSPPKTTSPEPQESPTLPSTEGQVVKLLSGPKETPAAQSPHR
GPSDTKRADVAGPRPCQRSLSVLSPRQPAQNRESTPLASGPSSFQAGSVRDRVHKFTSDSPMAARLQDG
TPQAALSPLTPARLLGPSLTSTTPASSSSGSSRGPSDTSSRFKEQRGVAQPLAQLRSCPQEEGPRGRG
LAARPLENRAGGPVARSEEPGAPLPVAVGTAEPGGSMKTTFTIEIKDGRQASTGRVLLPTGNQRAELTL
GLRAPPTLLSTSSGGKSTITRVNSPGTLARLGSVTHVTSFSSHAPPSSRGGCSIKMEAEPAEPLAAAVEAA
NGAEQTRVNKAPEGRSPLSAEELMTIEDEGVLDKMLDQSTDFEERKLIRAAIRELRQRKRDQDKERERR
LQEARGRPGEGRGNTATETTTTRHSQRAADGSAVSTVTKTERLVHSNDGTRTARTTTVESSFVRRSENGSG
STMMQTKTFSSSSSKMGSIFDREDQASPRAGSLAALEKRQAEKKELMKAQSLPKTSASQARKAMIEK
LEKEGAAGSPGGPRAAVQRSTSFQVNPANSIKQMLLDWCRAKTRGYEHVDIQNFSSSWSDGMAFCALVHN
FFPEAFDYGQLSPQNRQNFVAFSSAETHADCPQLDTEDMVRLREPDKMLVDCVPLVEVDDMMIMGK
KPDPKCVFTYVQSLYNHLRRHELRLRGKNV

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_134270

ORF Size: 2820 bp

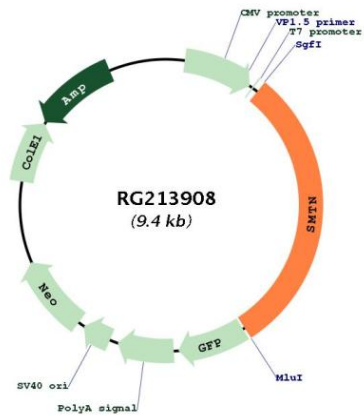
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_134270.1, NP_599032.1</u>
RefSeq Size:	3198 bp
RefSeq ORF:	2823 bp
Locus ID:	6525
UniProt ID:	<u>P53814</u>
Cytogenetics:	22q12.2
Domains:	CH
Gene Summary:	This gene encodes a structural protein that is found exclusively in contractile smooth muscle cells. It associates with stress fibers and constitutes part of the cytoskeleton. This gene is localized to chromosome 22q12.3, distal to the TUPLE1 locus and outside the DiGeorge syndrome deletion. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, May 2011]

Product images:



Circular map for RG213908