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Product datasheet for RG202191

Smoothelin (SMTN) (NM_134269) 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:

>RG202191 representing NM_134269
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGACGAGGCCTTAGCTGGGCTGGATGAGGGAGCCCTTCGGAAGCTGCTGGAGGTCACAGCAGATC
TGGCAGAGCGGCGGCGCATCCGCTCAGCCATCCGGGAACTGCAGCGGCAGGAGCTGGAGCGCGAGGAGGA
GGCCCTGGCATCCAAGCGTTTCCGTGCCGAGCGGCAGGACAACAAGGAGAACTGGCTGCACTCTCAGCAG
CGGGAAGCTGAGCAGCGGGCTGCCCTGGCACGGCTGGCAGGGCAGCTGGAGTCCATGAACGATGTGGAGG
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TCAAGAGAGGACAGCAAGGGGCTAGCGGCACACAGGCTGGAACAGTGTGAGGTGCCAGAGCGAGAGGAAC
AGGAACAGCAGGCAGAGGTTTCAAAGCCAACCCCCACCCCTGAAGGCACCAGCCAGGATGTGACCACAGT
GACACTCCTGCTGCGAGCCCCACCTGGGAGCACATCCAGCTCACCTGCCTCACCCAGCAGTTCACCCACC
CCTGCCTCTCCTGAGCCTCCATTGGAGCCTGCCGAGGCCCAGTGCCTTACAGCTGAGGTTCCAGGCAGCC
CAGAGCCACCCCCCAGCCCACCCAAGACCACCAGCCCTGAGCCTCAGGAGTCTCCAACGCTCCCCAGCAC
TGAGGGCCAGGTGGTCAACAAGCTTCTGTCTGGCCCCAAAGAGACCCCTGCTGCCCAGAGCCCCACCAGA
GGCCCCTCTGACACCAAGAGAGCAGACGTGGCTGGACCCCGACCCTGCCAACGCTCCCTGTCGGTGCTCA
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CTGCCTCCTCCTCCAGCGGCTCCTCCTCTCGGGGCCCCAGTGATACCTCCTCCCGGTTCAGCAAGGAGCA
ACGAGGAGTAGCCCAGCCCCTGGCCCAGCTTCGAAGCTGCCCCCAGGAGGAGGGCCCCAGGGGGCGGGGC
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TGCCCGTGGCCGTCGGCACTGCCGAGCCAGGGGGCAGTATGAAGACCACATTCACCATCGAGATCAAGGA
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GCCCTGGGACCCTGGCTCGGCTGGGCAGTGTCACTCATGTCACCAGCTTCAGCCATGCCCCCCCCAGTAG
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AATGGGGCTGAGCAGACCCGAGTGAACAAAGCACCAGAAGGGCGGAGCCCTCTGAGCGCTGAGGAGCTGA
TGACTATTGAGGATGAAGGAGTCTTGGACAAGATGCTGGATCAGAGCACGGACTTTGAAGAGCGGAAGCT
CATCCGGGCTGCACTTCGTGAGCTCCGACAAAGGAAGAGAGACCAGCGGGACAAGGAGCGGGAACGGCGG
CTGCAGGAGGCACGGGGCCGGCCAGGGGAGGGGCGCGGCAACACAGCCACTGAGACCACCACGAGGCACA
GCCAGCGGGCAGCTGATGGCTCTGCTGTCAGCACTGTTACCAAGACTGAGCGGCTCGTCCACTCCAATGA
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GCACGTCGACATCCAGAACTTCTCCTCCAGCTGGAGTGATGGGATGGCCTTCTGTGCCCTGGTGCACAAC
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TCTCATCTGCGGAGACCCATGCGGACTGCCCGCAGCTCCTGGATACAGAGGACATGGTGCGGCTTCGAGA
GCCTGACTGGAAGTGCGTGTACACGTACATCCAGGAATTCTACCGCTGTCTGGTCCAGAAGGGGCTGGTA
AAAACCAAAAAGTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

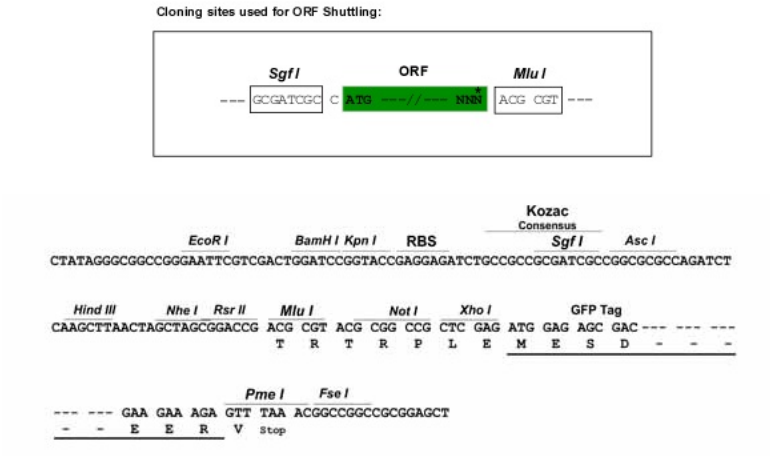
>RG202191 representing NM_134269
Red=Cloning site Green=Tags(s)

MADEALAGLDEGALRKLLEVTADLAERRRIRSAIRELQRQELEREEEALASKRFRAERQDNKENWLHSQQ
REAEQRAALARLAGQLESMNDVEELTALLRSAGEYEERKLIRAAIRRVRAQEIEAATLAGRLYSGRPNSG
SREDSKGLAAHRLEQCEVPEREEQEQQAEVSKPTPTPEGTSQDVTTVTLLLRAPPGSTSSSPASPSSSPT
PASPEPPLEPAEAQCLTAEVPGSPEPPPSPPKTTSPEPQESPTLPSTEGQVVNKLLSGPKETPAAQSPTR
GPSDTKRADVAGPRPCQRSLSVLSPRQPAQNRESTPLASGPSSFQRAGSVRDRVHKFTSDSPMAARLQDG
TPQAALSPLTPARLLGPSLTSTTPASSSSGSSSRGPSDTSSRFSKEQRGVAQPLAQLRSCPQEEGPRGRG
LAARPLENRAGGPVARSEEPGAPLPVAVGTAEPGGSMKTTFTIEIKDGRGQASTGRVLLPTGNQRAELTL
GLRAPPTLLSTSSGGKSTITRVNSPGTLARLGSVTHVTSFSHAPPSSRGGCSIKMEPEPAEPLAAAVEAA
NGAEQTRVNKAPEGRSPLSAEELMTIEDEGVLDKMLDQSTDFEERKLIRAALRELRQRKRDQRDKERERR
LQEARGRPGEGRGNTATETTTRHSQRAADGSAVSTVTKTERLVHSNDGTRTARTTTVESSFVRRSENGSG
STMMQTKTFSSSSSSKKMGSIFDREDQASPRAGSLAALEKRQAEKKKELMKAQSLPKTSASQARKAMIEK
LEKEGAAGSPGGPRAAVQRSTSFGVPNANSIKQMLLDWCRAKTRGYEHVDIQNFSSSWSDGMAFCALVHN
FFPEAFDYGQLSPQNRRQNFEVAFSSAETHADCPQLLDTEDMVRLREPDWKCVYTYIQEFYRCLVQKGLV
KTKKS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_134269

ORF Size: 2745 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: NM_134269.1, NP_599031.1

RefSeq Size: 3294 bp

RefSeq ORF: 2748 bp

Locus ID: 6525

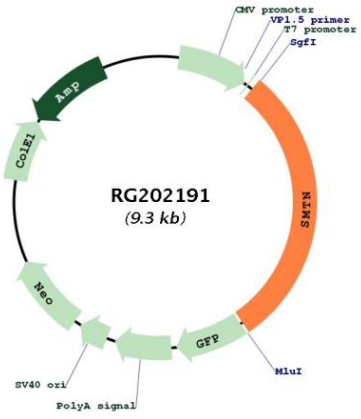
UniProt ID: P53814

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 RG202191