

Product datasheet for **RR205918**

Smad4 (NM_019275) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Smad4 (NM_019275) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Smad4
Synonyms:	Madh4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR205918 representing NM_019275
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGACAATATGTCTATTACAAATACACCGACAAGCAATGACGCCTGTCTGAGCATTGTACACAGTTTGA
 TGTGCCACAGACAAGGTGGAGAGAGTGAGACATTTGCCAAAAGAGCAATTGAGAGTCTGGTAAAGAAGCT
 GAAAGAGAAGAAAGATGAACTGGATTCTTTAATAACAGCTATCACTACAAATGGAGCTCACCCAGCAAG
 TGTGTCCACATACAGAGAACACTGGATGGAGACTGCAGGTGGCTGGTCGGAAAGGATTTCTCATGTGA
 TCTATGCCCGTCTGTGGAGGTGGCTGATCTACACAAGAACAATAAAACATGTTAAATATTGTGAGTA
 TGCATTTGACTTAAAATGTGATAGCGTCTGTGTAACCCATATCACTATGAGCGGTTGTCTCACCTGGA
 ATTGATCTCTGGATTAACACTGCAGAGTAATGCTCCACCAAGTATGTTAGTGAAGGATGAATATGTTT
 ATGACTTTGAAGGACAGCCATCCTTACCCACGGAAGGACATTGATTCAAACATCCAACATCCACCAAG
 TAATCGCGCATCCACGGAGAGCTACAGCGCCCCAGCTCTGTTAGCCCCATCAGAGTCTAATGCCACCAGT
 ACCACCAACTTCCCAACATTCTGTGGCTTCCACAAGTCAGCCGGCCAGCATTCTGGCAGGCAGCCATA
 GTGAAGGACTGTTGCAGATAGCTTCAGGGCCTCAGCCAGGACAGCAGCAGAATGGATTCAGTCTCAGCC
 AGCTACTTACCACCATAACAGCACTACCACCTGGACTGGAAGTAGGACTGCACCATACACACCTAATTTG
 CCTCACCACAAAACGGCCATCTTACAGCACCACCCGCCTATGCCGCCCATCCTGGACATTAAGTGGCCG
 TTCACAATGAGCTTGATTCCAGCCTCCATTTCCAATCATCTGCTCCTGAATATTGGTGTTCATTGC
 TTACTTTGAAATGGATGTTTCAAGTAGGAGAGACATTTAAAGTCCCTTCAAGCTGTCTATTGTAAGTGTG
 GATGGATACGTGGATCCTTCTGGAGGAGATCGCTTTTGCCTGGTCAACTCTCAATGTCCACAGGACAG
 AAGCTATTGAGAGAGCAAGGTTGCACATAGGCAAGGAGTGCAGTTGGAGTGAAGGGGACAGT
 GTGGGTACAGTGCCTCAGTGACCACGCCGCTCTGTCGAGAGTACTACCTGGACCGTGAAGCTGGCCGA
 GCACCTGGTGACGCCGTCACAAGATCTACCCAGTGCATATATAAAGGCTTTGATTTGCGGCAGTGTG
 ACCGGCAGATGCAGCAGCAGCGGCCACCCGCGAAGCCGAGCTGCTGCCAGGGCAGCTGTGGCAGG
 AAACATCCCTGGTCTGGTCCGTAGGTGGAATAGCCCCGCCATCAGTCTGTCTGCTGCTGCTGCTGCTG
 GGTGTAGACGACCTCCGGCGCTTGTGCATACTCAGGATGAGCTTCGTGAAGGGCTGGGGCCAGACTACC
 CGAGACAGAGCATCAAAGAAACCCGCTGCTGGATTGAGATTACCTCCACCGAGCTCTGCAGCTCCTGGA
 TGAAGTCTGCACACCATGCCATTGCGGACCCACAGCCTTAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR205918 representing NM_019275
 Red=Cloning site Green=Tags(s)

MDNMSITNTPTSNDACLIVHSLMCHRQGGSETFKRAIESLVKCLKKDELDSLITAITTNGAHPK
 CVTIQRTLDGRLQVAGRKGFPHVIYARLWRWDLHKNELKHVKYCYAFDLKCDSSVCVNPYHYERVVSPG
 IDLSGLTLQSNAPPSMLVKDEYVHDFEGQPSLPTEGHSIQTIQHPPSNRASTETYSAPALLAPSESNA
 TTNFPNIPVASTSQPASILAGSHSEGLLQIASGPOPGQQNGFTAQPATYHHNSTTTWTGSRTAPYTPNL
 PHHQNGHLQHHPMPHPGHYWPVHNELAFQPPISNHPAPEYWCIAFYFEMDVQVGETFKVPSSCPIVTV
 DGYVDPSGGDRFLGQLSNVHRTEAIERARLHIGKGVQLECKGEGDVWRCLSDHAVFVQSYLLDREAGR
 APGDAVHKIYPSAYIKVFDLRQCHRQMQQAATAQAAAAAQAQAAVAGNIPGPGSVGGIAPAIISLSAAAGI
 GVDDLRLRLCILRMSFVKGWGPDYPRQSIKETPCWIEIHLHRLQLLDEVLHTMPIADPQLD

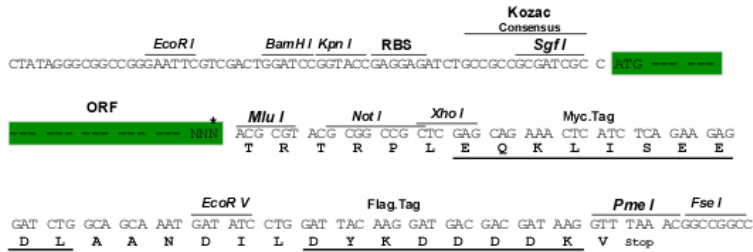
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

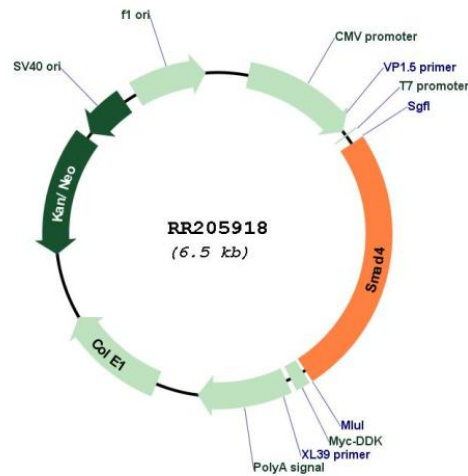
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_019275
ORF Size:	1656 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none">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_019275.3 , NP_062148.1
RefSeq Size:	3056 bp
RefSeq ORF:	1659 bp
Locus ID:	50554
UniProt ID:	O70437
Cytogenetics:	18q12.2
MW:	60.5 kDa
Gene Summary:	transduces signal from TGF-beta; deletion of human homolog gene is associated with pancreatic carcinomas [RGD, Feb 2006]