

Product datasheet for **RG236586**

Amelotin (AMTN) (NM_001286731) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Amelotin (AMTN) (NM_001286731) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Amelotin
Synonyms:	A13B; UNQ689
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG236586 representing NM_001286731. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAGGAGTACGATTCTACTGTTTTGTCTTCTAGGATCAACTCGGTCATTACCACTCAAACCTGCTTTG
GGACTCCCTCCCACAAAAGTGGCTCCGGATCAGGGAACACTACCAAACCAACAGCAGTCAAATCAGGTC
TTTCCTTCTTTAAGTCTGATACCATTAAACACAGATGCTCACACTGGGGCCAGATCTGCATCTGTTAAAT
CCTGCTGCAGGAATGACACCTGGTACCCAGACCCACCCATTGACCCTGGGAGGGTTGAATGTACAACAG
CAACTGCACCCACATGTGTTACCAATTTTGTACACAACCTGGAGCCCAGGGCACTATCCTAAGCTCA
GAGGAATTGCCACAAATCTTACGAGCCTCATCATCCATTCTTGTCCGGGAGGCATCCTGCCACC
AGTCAGGCAGGGGCTAATCCAGATGTCCAGGATGGAAGCCTTCCAGCAGGAGGAGCAGGTGTAAATCCT
GCCACCCAGGGAACCCAGCAGGCCGCCTCCAACTCCAGTGGCACAGATGACGACTTTGCAGTGACC
ACCCCTGCAGGCATCAAAGGAGCACACATGCCATCGAGGAAGCCACCACAGAATCAGCAAATGGAATT
CAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAAAC
```



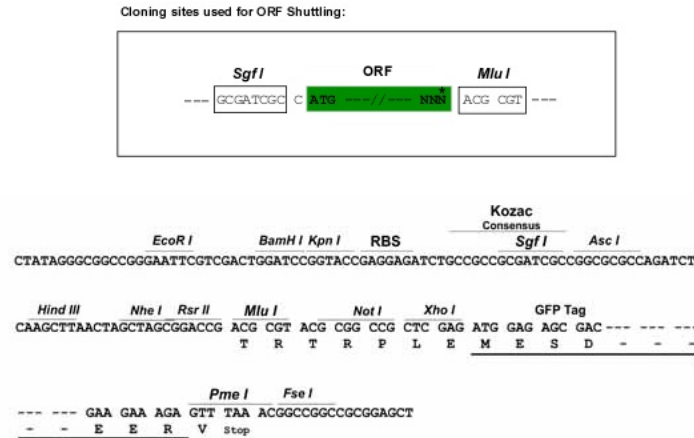
[View online »](#)

Protein Sequence: >Peptide sequence encoded by RG236586
 Blue=ORF Red=Cloning site Green=Tag(s)

MRSTILLFCLLGSTRSLPLKPALGLPPTKLAPDQGTLPNQQQSNQVFPSSLIPLTQMLTLGPDHLHN
 PAAGMPTGTQTHPLTLGGLNVQQQLHHPVLPFVFTQLGAQGTILSSELPQIFTSLIIHSLFPGGILPT
 SQAGANPDVQDGLPAGGAGVNPATQGTAPAGRLPTPSGTDDDFAVTTPAGIQRSTHAIEEATTESANGI
 Q
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001286731

ORF Size: 624 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).

RefSeq: [NM_001286731.2](#)

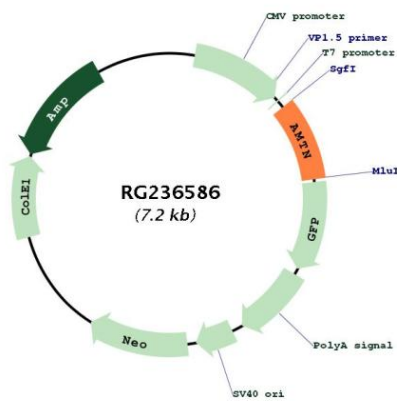
RefSeq Size: 1020 bp

RefSeq ORF: 627 bp

Locus ID: 401138
UniProt ID: [Q6UX39](#)
Cytogenetics: 4q13.3
MW: 21.9 kDa

Gene Summary: The mineralized portions of teeth, the dentin and enamel, are formed by mesenchyme-derived odontoblasts and epithelium-derived ameloblasts, respectively. As ameloblasts differentiate, they deposit specific proteins necessary for enamel formation, including amelogenin (AMELX; MIM 300391), enamelin (ENAM; MIM 606585), and ameloblastin (AMBN; MIM 601259), in the organic enamel matrix. Amelotin is specifically expressed in maturation-stage ameloblasts (Iwasaki et al., 2005 [PubMed 16304441]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG236586