

Product datasheet for **RG221473**

Amelotin (AMTN) (NM_212557) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Amelotin (AMTN) (NM_212557) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Amelotin
Synonyms: AI3B; UNQ689
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG221473 representing NM_212557
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGGAGTACGATTCTACTGTTTTGTCTTCTAGGATCAACTCGGTCATTACCACAGCTCAAACCTGCTT
 TGGGACTCCCTCCACAAAACACTGGCTCCGGATCAGGGAACACTACCAACCAACAGCAGTCAAATCAGGT
 CTTTCCTCTTTAAGTCTGATACCATTAAACACAGATGCTCACACTGGGGCCAGATCTGCATCTGTTAAAT
 CCTGCTGCAGGAATGACACCTGGTACCCAGACCCACCCATTGACCCTGGGAGGGTTGAATGTACAACAGC
 AACTGCACCCACATGTGTACCAATTTTGTACACAACCTGGAGCCCAGGGCACTATCCTAAGCTCAGA
 GGAATTGCCACAAATCTTCACGAGCCTCATCATCCATTCTTGTCCCGGAGGCATCCTGCCACCAAGT
 CAGGCAGGGGCTAATCCAGATGTCCAGGATGGAAGCCTTCCAGCAGGAGGAGCAGGTGTAATCCTGCCA
 CCCAGGGAACCCAGCAGGCCGCTCCCAACTCCAGTGGCACAGATGACGACTTTGCAAGTACCACCCC
 TGCAGGCATCAAAGGAGCACACATGCCATTGAGGAAGCCACCACAGAATCAGCAAATGGAATTCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221473 representing NM_212557
 Red=Cloning site Green=Tags(s)

MRSTILLFCLLGSTRSLPQLKPALGLPPTKLAPDQGLPNQQSNQVFPSSLIPLTQMLTLPDLHLLN
 PAAGMTPGTQTHPLTLGGLNVQQQLHPHVLPVIFVTQLGAQGTILSSELPQIFTSLSLIHSLFPGGILPTS
 QAGANPDVQDGSLPAGGAGVNPATQGTTPAGRLPTPSGTDDEFVTTTPAGIQRSTHAIIEEATTESANGIQ

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_212557

ORF Size: 627 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_212557.1](#), [NP_997722.1](#)

RefSeq Size: 1073 bp

RefSeq ORF: 630 bp

Locus ID: 401138

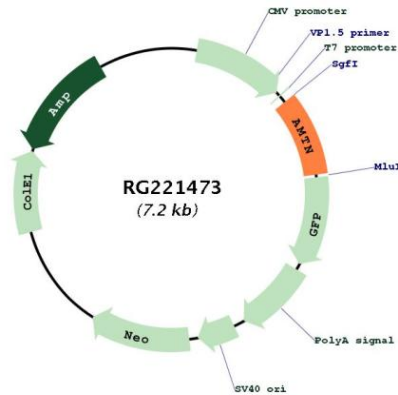
UniProt ID: [Q6UX39](#)

Cytogenetics: 4q13.3

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 RG221473