

Product datasheet for SC334480

OriGene Technologies, Inc.

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Amelotin (AMTN) (NM_001286731) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Amelotin (AMTN) (NM 001286731) Human Untagged Clone

Tag: Tag Free Symbol: AMTN

Synonyms: Al3B; UNQ689

Mammalian Cell

E. coli Selection:

Neomycin

Selection: Vector:

pCMV6-Entry (PS100001)
Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001286731, the custom clone sequence may differ by one or

more nucleotides

ATGAGGAGTACGATTCTACTGTTTTGTCTTCTAGGATCAACTCGGTCATTACCACTCAAACCTGCTTTGG
GACTCCCTCCCACAAACTGGCTCCGGATCAGGGAACACTACCAAACCAACAGCAGTCAAATCAGGTCTT
TCCTTCTTTAAGTCTGATACCATTAACACAGATGCTCACACTGGGGCCAGATCTGCATCTGTTAAATCCT
GCTGCAGGAATGACACCTGGTACCCAGACCCACCCATTGACCCTGGGAGGGTTGAATGTACAACAGCAAC
TGCACCCACATGTGTTACCAATTTTTGTCACACACACTTGGAGCCCAGGGCACTATCCTAAGCTCAGAGGA
ATTGCCACAAATCTTCACGAGCCTCATCATCCATTCCTTGTTCCCGGGAGGCATCCTGCCCACCAGTCAG
GCAGGGGCTAATCCAGATGTCCAGGATGGAAGCCTTCCAGCAGGAGGAGCAGGTGTAAATCCTGCCACCC
AGGGAACCCCAGCAGGCCGCCTCCCAACTCCCAGTGGCACAGATGACGACTTTGCAGTGACCACCCCTGC
AGGCATCCAAAGGAGCACACATGCCATCGAGGAAGCCACCACAGAATCAGCAAATGGAATTCAGTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_001286731

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

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: <u>NM 001286731.1</u>, <u>NP 001273660.1</u>

RefSeq Size: 1020 bp
RefSeq ORF: 627 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] Transcript Variant: This variant (2) uses an alternate in-frame splice junction at the 5' end of an exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is

1 aa shorter compared to isoform 1.