

## Product datasheet for RC216306

### AMELX (NM\_001142) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** AMELX (NM\_001142) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** AMELX  
**Synonyms:** AI1E; AIH1; ALGN; AMG; AMGL; AMGX  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC216306 representing NM\_001142  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGACCTGGATTTTATTTGCCTGCCTCCTGGGAGCAGCTTTTGCCATGCCTCTACCACCTCATCCTG  
GGCACCCTGGTTATATCAACTTCAGCTATGAGGTGCTTACCCCTTTGAAGTGGTACCAGAGCATAAGGCC  
ACCGTACCCTTCCTATGGTTACGAGCCCATGGGTGGATGGCTGCACCACCAATCATCCCGTGTCTGCC  
CAACAGCACCCCGACTCACACCCTGCAGCCTCATCACCACATCCAGTGGTCCAGCTCAGCAGCCCG  
TGATCCCCAGCAACCAATGATGCCGTTCTGGCCAACACTCCATGACTCCAATCCAACACCACCAGCC  
AAACCTCCCTCCGCCCGCCAGCAGCCCTACCAGCCCAGCCTGTTAGCCACAGCCTCACCAGCCCATG  
CAGCCCCAGCCACCTGTGCACCCATGCAGCCCTGCCGCCACAGCCACCTCTGCCTCCGATGTTCCCCA  
TGCAGCCCTGCCTCCCATGCTTCTGTACTCTGGAAGCTTGGCCATCAACAGACAAGACCAAGCG  
GGAGGAAGTGGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC216306 representing NM\_001142  
Red=Cloning site Green=Tags(s)

MGTWILFACLLGAAFAMPLPPHPGHPGYINFSYEVLTPLKWYQSIRPPYPSYGYEPMGGWLHHQIIPVLS  
QQHPPTHTLQPHHHIPVVPAQQPVIPQQPMPVPGQHSMTPIQHHQPNLPPPAQQPYQPVPQPHQPM  
QPQPPVHPMQPLPPQPLPPMFPMQPLPPMLPDLTLEAWPSTDKTKREEVD

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**



Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001142

ORF Size: 573 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\\_001142.2](#), [NP\\_001133.1](#)

RefSeq Size: 793 bp

RefSeq ORF: 576 bp

Locus ID: 265

UniProt ID: [Q99217](#)

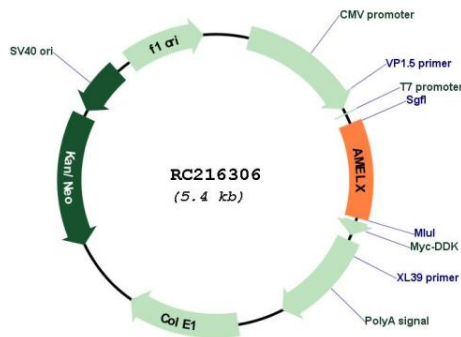
**Cytogenetics:** Xp22.2

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

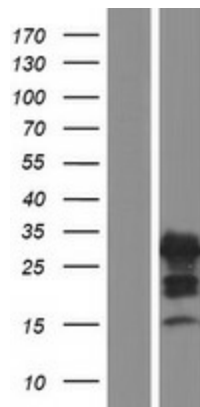
**MW:** 21.6 kDa

**Gene Summary:** This gene encodes a member of the amelogenin family of extracellular matrix proteins. Amelogenins are involved in biomineralization during tooth enamel development. Mutations in this gene cause X-linked amelogenesis imperfecta. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC216306



Western blot validation of overexpression lysate (Cat# [LY420105]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216306 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).