

Product datasheet for SC328542

AGA (NM_001171988) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: AGA (NM_001171988) Human Untagged Clone

Tag: Tag Free Symbol: AGA

Synonyms: AGU; ASRG; GA

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC328542 representing NM_001171988.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

TCCGAAAAAATCAGCCAACTGAGGAAAAAGTGGACTGCATC<mark>TAA</mark>

ACGCGTACGCGCCCCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul

ACCN: NM 001171988

Insert Size: 1011 bp



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AGA (NM_001171988) Human Untagged Clone - SC328542

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA

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 001171988.1</u>

RefSeq Size:2083 bpRefSeq ORF:1011 bp

Locus ID: 175

 UniProt ID:
 P20933

 Cytogenetics:
 4q34.3

Protein Families: Druggable Genome, Protease

Protein Pathways: Lysosome, Other glycan degradation

MW: 36.1 kDa

Gene Summary: This gene encodes a member of the N-terminal nucleophile (Ntn) hydrolase family of

proteins. The encoded preproprotein is proteolytically processed to generate alpha and beta chains that comprise the mature enzyme. This enzyme is involved in the catabolism of N-linked oligosaccharides of glycoproteins. It cleaves asparagine from N-acetylglucosamines as one of the final steps in the lysosomal breakdown of glycoproteins. Mutations in this gene are

associated with the lysosomal storage disease aspartylglycosaminuria that results in

progressive neurodegeneration. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is subject to proteolytic processing. [provided by

RefSeq, Nov 2015]

Transcript Variant: This variant (2) uses two alternate in-frame splice sites in the central coding region compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1. This isoform (2) may undergo proteolytic processing similar to isoform 1.