

Product datasheet for **RG229904**

AGA (NM_001171988) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: AGA (NM_001171988) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: AGA
Synonyms: AGU; ASRG; GA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG229904 representing NM_001171988
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGCGGAAGTCGAACTTGCCTGTGCTTCTCGTGCCGTTTCTGCTCTGCCAGGCCCTAGTGCGCTGCT
 CCAGCCCTCTGCCCTGGTCGTCAACACTTGGCCCTTTAAGAATGCAACCGAAGCAGCGTGGAGGGCATT
 AGCATCTGGAGGCTCTGCCCTGGATGCAGTGGAGAGCGGCTGTGCCATGTGTGAGAGAGAGCAGTGTGAC
 GGCTCTGTAGGCTTTGGAGGAAGTCCTGATGAACTTGGAGAAACCACACTAGATGCCATGATCATGGATG
 GCACTACTATGGATGTAGGAGCAGTAGGAGATCTCAGACGAATTAATAATGCTATTGGTGTGGCAGGAA
 AGTACTGGAACATACAACACACACTTTTAGTAGGAGAGTCAGCCACCACATTTGCTCAAAGTATGGGG
 TTTATCAATGAAGACTTATCTACCACTGCTTCTCAAGCTTTCATTTCAGATTGGCTTGTCTCGAATTGCC
 AGCCAAATTTATTGGAGGAATGTTATACCAGATCCCTCAAATACTGCGGACCCTACAAACCACCTGGTAT
 CTTAAAGCAGGATATTCCTATCCATAAAGAAACAGAAGATGATCGTGGTCATGACACTATTGGCATGGTT
 GTAATCCATAAGACAGGACATATTGCTGCTGGTACATCTACAAATGGAGACTCACCAATACCTGGAGCTG
 GAGCCTATGCTGACGATACTGCAGGGGCAGCCGACCCACTGGGAATGGTATATATTGATGCGCTTCTCT
 GCCAAGCTACCAAGCTGTAGAATACATGAGAAGAGGAGAAGATCCAACCATAGCTTGCCAAAAAGTGATT
 TCAAGAATCCAGAAGCATTTCAGAAATCTTTGGGGCTGTTATATGTGCCAATGTGACTGGAAGTTACG
 GTGCTGCTTGAATAAACTTTCAACATTTACTCAGTTTAGTTTCATGGTTTATAAATCCGAAAAAATCA
 GCCAACTGAGGAAAAAGTGGACTGCATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG229904 representing NM_001171988
 Red=Cloning site Green=Tags(s)

MARKSNLPVLLVPFLLCQALVRCSSPLPLVVNTWPFKNATEAAWRALASGGSALDAVESGCAMCEREQCD
 GSVGFGGSPDELGETTLDAMIMDGTMTDVGAVGDLRRIKNAIGVARKVLEHTHTLLVGESATTFQAQSMG
 FINEDLSTTASQALHSDWLARNCPNYWRNVIPDPSKYCGPYKPPGILKQDPIPHKETEDDRGHDTIGMV
 VIHKTGHIAAGTSTNGDSPIPGAGAYADDTAGAAAATGNGDILMRFLPSYQAVEYMRREDPTIACQKVI
 SRIQKHPEFFGAVICANVTGSYGAACNKLSTFTQFSFMVYNSEKNQPTEEKVDCI

TRTRPLE - GFP Tag - V

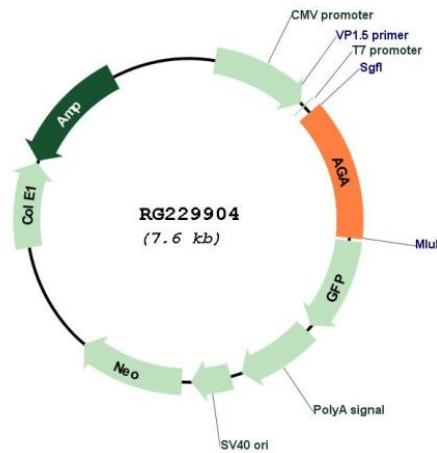
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001171988

ORF Size: 1008 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:	<ol style="list-style-type: none">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_001171988.1 , NP_001165459.1
RefSeq Size:	2083 bp
RefSeq ORF:	1011 bp
Locus ID:	175
UniProt ID:	P20933
Cytogenetics:	4q34.3
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Lysosome, Other glycan degradation
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]