

Product datasheet for **RG221553**

AGRP (NM_007316) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: AGRP (NM_007316) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: AGRP
Synonyms: agouti related protein; AGRT; Agrt; ART; Art; ASIP2; MGC118963; orexigenic neuropeptide
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG221553 representing NM_007316
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGACCGCAGCGGTGCTGAGCTGTGCCCTGCTGCTGGCACTGCCTGCCACGCGAGGAGCCAGATGG
GCTTGGCCCCATGGAGGGCATCAGAAGGCCTGACCAGGCCCTGCTCCAGAGCTCCAGGCCTGGGCT
GCGGGCCCCACTGAAGAAGACAACACTGCAGAACAGGCAGAAGAGGATCTGTTGCAGGAGGCTCAGGCCTG
GCAGAGGTACTAGACCTGCAGGACCGCAGCCCGCTCCTCACGTCGCTGCGTAAGGCTGCATGAGTCTT
GCCTGGGACAGCAGGTGCCTTGTGTGACCCATGTGCCACGTGCTACTGCCGCTTCTTAATGCCTTCTG
CTACTGCCGAAGCTGGGTACTGCCATGAATCCCTGCAGCCGCACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221553 representing NM_007316
Red=Cloning site Green=Tags(s)
MLTAAVLSCALLLALPATRGAQMGLAPMEGIRRPDQALLPELPGLGLRAPLKKTTAEQAEEDLLQEAAQAL
AEVLDLQDREPRSSRRCVRLHESCLGQQVPCDDPCATCYCRFFNAFCYCRKLGTAAMNPCSRT

TRTRPLE - GFP Tag - V

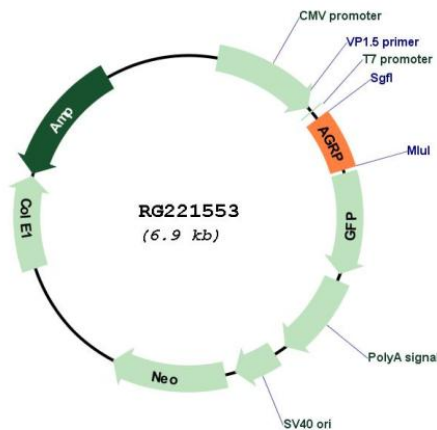
Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Cloning sites used for ORF Shutting:


Plasmid Map:

ACCN: NM_007316

ORF Size: 396 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:	<u>NM_007316.1</u> , <u>NP_015531.1</u>
RefSeq Size:	486 bp
RefSeq ORF:	398 bp
Locus ID:	181
Cytogenetics:	16q22.1
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Adipocytokine signaling pathway
Gene Summary:	This gene encodes an antagonist of the melanocortin-3 and melanocortin-4 receptor. It appears to regulate hypothalamic control of feeding behavior via melanocortin receptor and/or intracellular calcium regulation, and thus plays a role in weight homeostasis. Mutations in this gene have been associated with late on-set obesity. [provided by RefSeq, Dec 2009]