

Product datasheet for **MG218405**

Atrn (NM_009730) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atrn (NM_009730) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Atrn
Synonyms:	AW558010; mg; Mgc; Mgca
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218405 representing NM_009730 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >MG218405 representing NM_009730
 Red=Cloning site Green=Tags(s)

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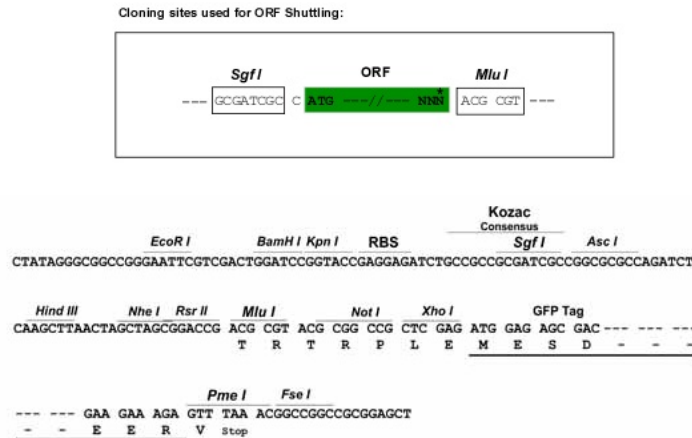
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TRTRPLE - GFP Tag - V

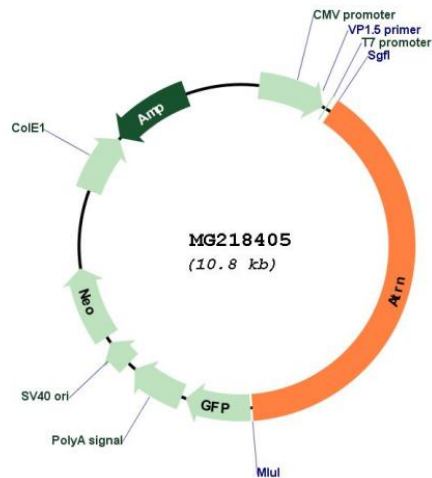
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009730

ORF Size: 4284 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_009730.2](#), [NP_033860.2](#)

RefSeq Size: 8740 bp

RefSeq ORF: 4287 bp

Locus ID: 11990

UniProt ID: [Q9WU60](#)

Cytogenetics: 2 63.26 cM

Gene Summary: This gene encodes a widely expressed transmembrane glycoprotein that plays important roles in diverse physiological processes such as regulation of hair pigmentation, monocyte-T cell interaction and control of energy homeostasis. The encoded preproprotein undergoes proteolytic processing to generate a mature, functional protein. Certain mutations in this gene are responsible for the mahogany mouse phenotype of dark brown or black coat on a normally agouti background. Mice with loss-of-function mutations in this gene exhibit black coat color, tremor, adiposity, higher basal metabolic rate, juvenile-onset hypomyelination and age-dependent spongiform neurodegeneration of the central nervous system. [provided by RefSeq, Jul 2016]