

Product datasheet for **MG226650**

Ins2 (NM_001185084) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ins2 (NM_001185084) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Ins2
Synonyms: AA986540; In; Ins-2; InsII; Mod; Mody; Mody4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG226650 representing NM_001185084
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCTGTGGATGCGCTTCTGCCCTGCTGGCCCTGCTTCTCTGGGAGTCCCACCCACCCAGG
CTTTTGTCAAGCAGCACCTTTGTGGTCCACCTGGTGGAGGCTCTACCTGGTGTGTGGGAGCGTGG
CTTCTTACACCCATGTCCCGCGTGAAGTGGAGGACCCACAAGTGGCACAAGTGGAGCTGGGTGGA
GGCCCGGAGCAGGTGACCTTACAGCTTGGCACTGGAGGTGGCCAGCAGAAGCGTGGCATTGTAGATC
AGTGTGCACCAGCATCTGCTCCCTCTACCAGCTGGAGAAGTACTGCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG226650 representing NM_001185084
Red=Cloning site Green=Tags(s)
MALWMRFLPLLALLFLWESHPTQAFVKQHLGSHLVEALYLVCGERGFFYTPMSRREVEDPQVAQLELGG
GPGAGDLQTLALEVAQQKRGIVDQCCTSICSLYQLENYCN

TRTRPLE - GFP Tag - V

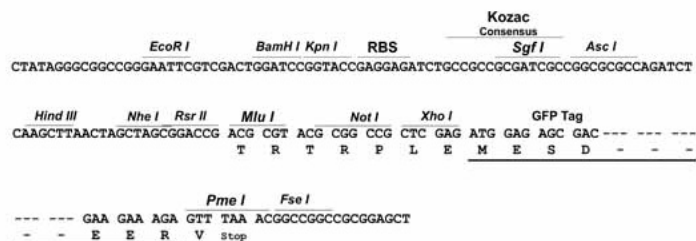
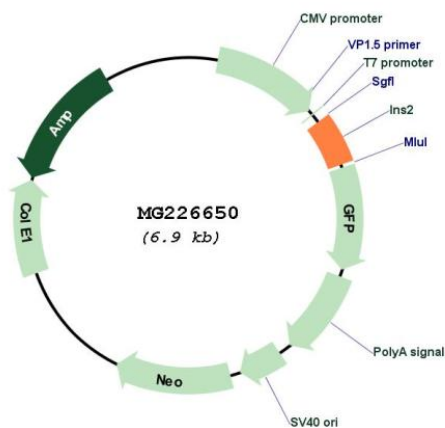
Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Cloning sites used for ORF Shutting:


Plasmid Map:


ACCN: NM_001185084

ORF Size: 330 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_001185084.2</u> , <u>NP_001172013.1</u>
RefSeq Size:	569 bp
RefSeq ORF:	333 bp
Locus ID:	16334
UniProt ID:	<u>P01326</u>
Cytogenetics:	7 88.0 cM
Gene Summary:	This gene encodes insulin, a peptide hormone that plays a vital role in the regulation of carbohydrate and lipid metabolism. The encoded precursor protein undergoes proteolytic cleavage to produce a disulfide-linked heterodimeric functional protein that is stored in secretory granules. An increase in blood glucose levels, among others, induces the release of insulin from the secretory granules. Mice deficient in the functional hormone encoded by this gene develop diabetes mellitus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]