

Product datasheet for RR210144L4

Cry2 (NM_133405) Rat Tagged Lenti ORF Clone

Product data:

OriGene Technologies, Inc.

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Product Type:	Expression Plasmids	
Product Name:	Cry2 (NM_133405) Rat Tagged Lenti ORF Clone	
Tag:	mGFP	
Symbol:	Cry2	
Mammalian Cell Selection:	Puromycin	
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)	
E. coli Selection:	Chloramphenicol (34 ug/mL)	
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR210144)	1.
Restriction Sites:	Sgfl-Mlul	
Cloning Scheme:	Cloning sites used for ORF Shuttling: Sgf I ORF Mlu I GCG ATC GC C ATG// NNN ACG CGT Kozak	
	<u>Kozak</u> consensus EcoR I BamH I <u>RBS</u> <u>Sgf I</u> ORF	
	CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C	

 Mlui
 Noti
 Xhoi
 mGFP Tag

 MINN
 ACG CGT ACG CGG CCG CTC GAG ATG AGC GGG GGC
 T
 T

 T
 R
 T
 R
 P
 L
 E

 M
 S
 G
 G

--- GGA CTC AGA GTT TGG GTA GGA AGC

* The last codon before the Stop codon of the ORF.

ACCN: ORF Size: NM_133405 1782 bp



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	y2 (NM_133405) Rat Tagged Lenti ORF Clone – RR210144L4
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <u>custsupport@origene.com</u> or by calling 301.340.3188 option 3 for pricing and delivery.
	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. <u>More info</u>
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 Meth	 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 133405.2, NP 596896.2</u>
RefSeq Size:	3988 bp
RefSeq ORF:	1785 bp
Locus ID:	170917
Cytogenetics:	3q24
Gene Summary:	This gene encodes a flavin adenine dinucleotide-binding protein that is a key component of the circadian core oscillator complex, which regulates the circadian clock. This gene is upregulated by Clock/Arntl heterodimers but then represses this upregulation in a feedback loop using Per/Cry heterodimers to interact with Clock/Arntl. Polymorphisms in this gene have been associated with altered sleep patterns. The encoded protein is widely conserved across plants and animals. [provided by RefSeq, Feb 2014]

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