

Product datasheet for MG200656

EgIn1 (NM_053207) Mouse Tagged ORF Clone

Product data:

OriGene Technologies, Inc.

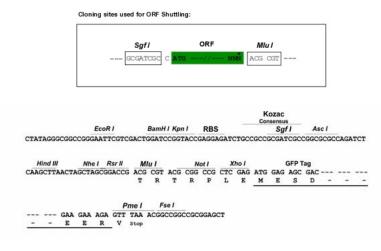
9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product Type:	Expression Plasmids
Product Name:	EgIn1 (NM_053207) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Egln1
Synonyms:	Al503754; C1orf12; Hif-p4h-2; HIF-PH2; HPH-2; ORF13; Phd2; SM-20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG200656 representing NM_053207 Red=Cloning site Blue=ORF Green=Tags(s)
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGGTTGCTTGTTACCCAGGCAACGGAACAGGCTATGTCCGTCACGTTGATAACCCAAATGGAGATGGAA GATGCGTGACATGTATATATTATCTAAATAAAGACTGGGACGCCAAGGTAAGTGGAGGTATTCTTCGAAT TTTTCCAGAAGGCAAAGCCCAGTTTGCTGACATTGAACCCAAATTTGATAGACTGCTGTTTTTCTGGTCT GACCGGCGTAACCCTCATGAAGTACAGCCAGCATACGCCACAAGGTACGCAATAACTGTTTGGTATTTTG ATGCAGATGAGCGAGCGAGAGCTAAAGTAAAATATCTAACAGGTGAGAAAAGGTGTGAGGGTTGAACTCAA GCCCAATTCAGTCAGCAAAGACGTC
	ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA
Protein Sequence:	<pre>>MG200656 representing NM_053207 Red=Cloning site Green=Tags(s)</pre>
	MVACYPGNGTGYVRHVDNPNGDGRCVTCIYYLNKDWDAKVSGGILRIFPEGKAQFADIEPKFDRLLFFWS DRRNPHEVQPAYATRYAITVWYFDADERARAKVKYLTGEKGVRVELKPNSVSKDV
	TRTRPLE - GFP Tag - V
Chromatograms:	https://cdn.origene.com/chromatograms/ja1941_f11.zip
Restriction Sites:	Sgfl-Mlul



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Cloning Scheme:



ACCN:	NM_053207
ORF Size:	375 bp
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).

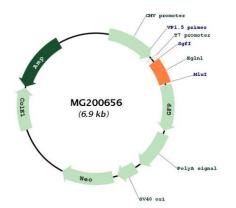
This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Second States St

Reconstitution Method:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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 053207.1, NP 444437.1</u>
RefSeq Size:	2539 bp
RefSeq ORF:	1203 bp
Locus ID:	112405
UniProt ID:	<u>Q91YE3</u>
Cytogenetics:	8 E2
Gene Summary:	Cellular oxygen sensor that catalyzes, under normoxic conditions, the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. Hydroxylates a specific proline found in each of the oxygen-dependent degradation (ODD) domains (N-terminal, NODD, and C-terminal, CODD) of HIF1A. Also hydroxylates HIF2A. Has a preference for the CODD site for both HIF1A and HIF1B. Hydroxylated HIFs are then targeted for proteasomal degradation via the von Hippel-Lindau ubiquitination complex. Under hypoxic conditions, the hydroxylation reaction is attenuated allowing HIFs to escape degradation resulting in their translocation to the nucleus, heterodimerization with HIF1B, and increased expression of hypoxy-inducible genes. EGLN1 is the most important isozyme under normoxia

expression of hypoxy-inducible genes. EGLN1 is the most important isozyme under normoxia and, through regulating the stability of HIF1, involved in various hypoxia-influenced processes such as angiogenesis in retinal and cardiac functionality. Target proteins are preferentially recognized via a LXXLAP motif.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG200656

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US