

## Product datasheet for **MG200656**

### **Egln1 (NM\_053207) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Egln1 (NM\_053207) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Egln1  
**Synonyms:** AI503754; 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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTTGCTTGTACCCAGGCAACGGAACAGGCTATGTCCGTCACGTTGATAACCCAAATGGAGATGGAA  
GATGCGTGACATGTATATATTATCTAAATAAAGACTGGGACGCCAAGGTAAGTGGAGGATTCTTCGAAT  
TTTTCCAGAAGGCAAAGCCAGTTTGTGACATTGAACCCAAATTTGATAGACTGCTGTTTTTCTGGTCT  
GACCGCGTAACCCTCATGAAGTACAGCCAGCATACGCCACAAGGTACGCAATAACTGTTTGGTATTTG  
ATGCAGATGAGCGAGCGAGAGCTAAAGTAAAATATCTAACAGGTGAGAAAGGTGTGAGGGTTGAAGTCAA  
GCCAATTCAGTCAGCAAAGACGTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG200656 representing NM\_053207  
**Red**=Cloning site **Green**=Tags(s)  
MVACYPGNGTGYVRHVDNPNPNDGRCVTCTIYYLNKDWDAKVSQGILRIFPEGKAQFADIEPKFDRLLFFWS  
DRRNPHEVQPAYATRYAITVWYFDADERARAKVKYLTGEKGVVVELKPNSVSKDV

**TRTRPLE** - GFP Tag - V

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1941\\_f11.zip](https://cdn.origene.com/chromatograms/ja1941_f11.zip)

**Restriction Sites:** SgfI-MluI



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**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\\_053207.1](#), [NP\\_444437.1](#)

**RefSeq Size:** 2539 bp

**RefSeq ORF:** 1203 bp

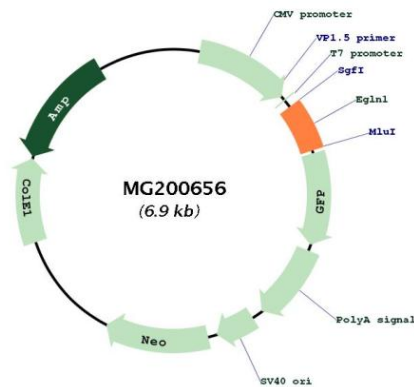
**Locus ID:** 112405

**UniProt ID:** [Q91YE3](#)

**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 hypoxia-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