

## Product datasheet for **MR205957L4V**

### Atf4 (NM\_009716) Mouse Tagged ORF Clone Lentiviral Particle

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Lentiviral Particles   |
| Product Name:             | Atf4 (NM_009716) Mouse Tagged ORF Clone Lentiviral Particle  |
| Symbol:                   | Atf4   |
| Synonyms:                 | Atf-4; C/ATF; CREB2; TAXREB67  |
| Mammalian Cell Selection: | Puromycin  |
| Vector:                   | pLenti-C-mGFP-P2A-Puro (PS100093)  |
| Tag:                      | mGFP   |
| ACCN:                     | NM_009716  |
| ORF Size:                 | 1050 bp  |
| ORF Nucleotide Sequence:  | The ORF insert of this clone is exactly the same as(MR205957).   |
| 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. <a href="#">More info</a> |
| OTI Annotation:           | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.   |
| RefSeq:                   | <a href="#">NM_009716.2</a>  |
| RefSeq Size:              | 1746 bp  |
| RefSeq ORF:               | 1050 bp  |
| Locus ID:                 | 11911  |
| UniProt ID:               | <a href="#">Q06507</a>   |
| Cytogenetics:             | 15 37.85 cM  |



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**Gene Summary:**

Transcriptional activator. Binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Binds to asymmetric CRE's as a heterodimer and to palindromic CRE's as a homodimer. Cooperates with FOXO1 in osteoblasts to regulate glucose homeostasis through suppression of beta-cell production and decrease in insulin production. Regulates the induction of DDIT3/CHOP and asparagine synthetase (ASNS) in response to ER stress. In concert with DDIT3/CHOP, activates the transcription of TRIB3 and promotes ER stress-induced neuronal apoptosis by regulating the transcriptional induction of BBC3/PUMA. Activates transcription of SIRT4. Regulates the circadian expression of the core clock component PER2 and the serotonin transporter SLC6A4. Binds in a circadian time-dependent manner to the cAMP response elements (CRE) in the SLC6A4 and PER2 promoters and periodically activates the transcription of these genes. [UniProtKB/Swiss-Prot Function]