

## Product datasheet for **MR224575L4V**

### **Sdhaf1 (NM\_001033140) Mouse Tagged ORF Clone Lentiviral Particle**

#### Product data:

|                                  |                                          |
|----------------------------------|------------------------------------------|
| <b>Product Type:</b>             | Lentiviral Particles                     |
| <b>Symbol:</b>                   | Sdhaf1                                   |
| <b>Synonyms:</b>                 | 0610010E21Rik; AI430885; AW490662; Lymr8 |
| <b>Mammalian Cell Selection:</b> | Puromycin                                |
| <b>Vector:</b>                   | pLenti-C-mGFP-P2A-Puro (PS100093)        |
| <b>Tag:</b>                      | mGFP                                     |
| <b>ACCN:</b>                     | NM_001033140                             |
| <b>ORF Size:</b>                 | 354 bp                                   |

**ORF Nucleotide Sequence:** The ORF insert of this clone is exactly the same as(MR224575).

**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.

|                      |                                                                 |
|----------------------|-----------------------------------------------------------------|
| <b>RefSeq:</b>       | <a href="#">NM_001033140.3</a> , <a href="#">NP_001028312.2</a> |
| <b>RefSeq Size:</b>  | 987 bp                                                          |
| <b>RefSeq ORF:</b>   | 357 bp                                                          |
| <b>Locus ID:</b>     | 68332                                                           |
| <b>UniProt ID:</b>   | <a href="#">Q3U276</a>                                          |
| <b>Cytogenetics:</b> | 7 B1                                                            |



**Gene Summary:**

Plays an essential role in the assembly of succinate dehydrogenase (SDH), an enzyme complex (also referred to as respiratory complex II) that is a component of both the tricarboxylic acid (TCA) cycle and the mitochondrial electron transport chain, and which couples the oxidation of succinate to fumarate with the reduction of ubiquinone (coenzyme Q) to ubiquinol. Promotes maturation of the iron-sulfur protein subunit Sdhb of the SDH catalytic dimer, protecting it from the deleterious effects of oxidants. May act together with SDHAF3. Contributes to iron-sulfur cluster incorporation into SDHB by binding to SDHB and recruiting the iron-sulfur transfer complex formed by HSC20, HSPA9 and ISCU through direct binding to HSC20.[UniProtKB/Swiss-Prot Function]