

## Product datasheet for **MR207547L3V**

### Eif2s3y (NM\_012011) Mouse Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Eif2s3y (NM_012011) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Eif2s3y
Synonyms:	Eif-2gy; Spy; Tfy
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_012011
ORF Size:	1419 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR207547).
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_012011.1</a>
RefSeq Size:	1801 bp
RefSeq ORF:	1419 bp
Locus ID:	26908
UniProt ID:	<a href="#">Q9Z0N2</a>
Cytogenetics:	Ypter



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**Gene Summary:**

As a subunit of eukaryotic initiation factor 2 (eIF2), involved in the early steps of protein synthesis. In the presence of GTP, eIF2 forms a ternary complex with initiator tRNA Met-tRNA<sup>i</sup> and then recruits the 40S ribosomal complex, a step that determines the rate of protein translation. This step is followed by mRNA binding to form the 43S pre-initiation complex. Junction of the 60S ribosomal subunit to form the 80S initiation complex is preceded by hydrolysis of the GTP bound to eIF2 and release of an eIF2-GDP binary complex. In order for eIF2 to recycle and catalyze another round of initiation, the GDP bound to eIF2 must exchange with GTP by way of a reaction catalyzed by eIF2B (By similarity). Along with its paralog on chromosome X, may contribute to spermatogenesis up to the round spermatid stage (PubMed:26823431).[UniProtKB/Swiss-Prot Function]