

## Product datasheet for **RC205859L2V**

### GRP78 (HSPA5) (NM\_005347) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	GRP78 (HSPA5) (NM_005347) Human Tagged ORF Clone Lentiviral Particle
Symbol:	GRP78
Synonyms:	BIP; GRP78; HEL-S-89n
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_005347
ORF Size:	1962 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC205859).
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_005347.2</a>
RefSeq Size:	3973 bp
RefSeq ORF:	1965 bp
Locus ID:	3309
UniProt ID:	<a href="#">P11021</a>
Cytogenetics:	9q33.3
Domains:	HSP70
Protein Families:	Druggable Genome



[View online »](#)

**Protein Pathways:** Antigen processing and presentation, Prion diseases

**MW:** 72.3 kDa

**Gene Summary:** The protein encoded by this gene is a member of the heat shock protein 70 (HSP70) family. This protein localizes to the lumen of the endoplasmic reticulum (ER) where it operates as a typical HSP70 chaperone involved in the folding and assembly of proteins in the ER and is a master regulator of ER homeostasis. During cellular stress, as during viral infection or tumorigenesis, this protein interacts with the transmembrane stress sensor proteins PERK (protein kinase R-like endoplasmic reticulum kinase), IRE1 (inositol-requiring kinase 1), and ATF6 (activating transcription factor 6) where it acts as a repressor of the unfolded protein response (UPR) and also plays a role in cellular apoptosis and senescence. Elevated expression and atypical translocation of this protein to the cell surface has been reported in viral infections and some types of cancer cells. At the cell surface this protein may facilitate viral attachment and entry to host cells. This gene is a therapeutic target for the treatment of coronavirus diseases and chemoresistant cancers. [provided by RefSeq, Jul 2020]