

Product datasheet for RC205859L3V

OriGene Technologies, Inc.

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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:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM_005347

ORF Size: 1962 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC205859).

OTI Disclaimer:

Sequence:

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.

RefSeq: <u>NM 005347.2</u>

 RefSeq Size:
 3973 bp

 RefSeq ORF:
 1965 bp

 Locus ID:
 3309

 UniProt ID:
 P11021

 Cytogenetics:
 9q33.3

 Domains:
 HSP70

Protein Families: Druggable Genome





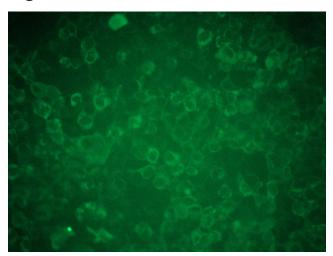
Protein Pathways: Antigen processing and presentation, Prion diseases

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 tumorogenesis, 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]

Product images:



[RC205859L3] was used to prepare Lentiviral particles using [TR30037] packaging kit. HEK293T cells were transduced with RC205859L3V particle to overexpress human HSPA5-Myc-DDK fusion protein.