

Product datasheet for MR210707L3V

OriGene Technologies, Inc.

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Vps35 (NM_022997) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Vps35 (NM_022997) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Vps35

Synonyms: Al647796; Mem3

Mammalian Cell

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Selection:

Puromycin

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

 Tag:
 Myc-DDK

 ACCN:
 NM_022997

ORF Size: 2388 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(MR210707).

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements.

Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA.

Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence

verification at a reduced cost. Please contact our customer care team at

<u>custsupport@origene.com</u> or by calling 301.340.3188 option 3 for pricing and delivery.

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 022997.4</u>

RefSeq Size: 3169 bp RefSeq ORF: 2391 bp





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Locus ID: 65114

UniProt ID: Q9EQH3

Cytogenetics: 8 41.61 cM

Gene Summary: Acts as component of the retromer cargo-selective complex (CSC). The CSC is believed to be

the core functional component of retromer or respective retromer complex variants acting to prevent missorting of selected transmembrane cargo proteins into the lysosomal degradation pathway. The recruitment of the CSC to the endosomal membrane involves RAB7A and SNX3. The CSC seems to associate with the cytoplasmic domain of cargo proteins predominantly via VPS35; however, these interactions seem to be of low affinity and retromer SNX proteins may also contribute to cargo selectivity thus questioning the classical function of the CSC. The SNX-BAR retromer mediates retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN) and is involved in endosome-to-plasma membrane transport for cargo protein recycling. The SNX3-retromer mediates the retrograde transport of WLS distinct from the SNX-BAR retromer pathway. The SNX27-retromer is believed to be involved in endosome-to-plasma membrane trafficking and recycling of a broad spectrum of cargo proteins. The CSC seems to act as recruitment hub for other proteins, such as the WASH complex and TBC1D5 (Probable). Required for retrograde transport of lysosomal enzyme receptor IGF2R and SLC11A2. Required to regulate transcytosis of the polymeric immunoglobulin receptor (plgR-plgA). Required for endosomal

localization of WASHC2 and mediates the association of the CSC with the WASH complex (By

similarity).[UniProtKB/Swiss-Prot Function]