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Product datasheet for MR207897L3V

Sesn1 (NM_001013370) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Sesn1 (NM_001013370) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Sesn1
Synonyms:	1110002G11Rik; AU044290; Pa26; Sest1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_001013370
ORF Size:	1479 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR207897).
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.
RefSeq:	NM_001013370.1, NP_001013388.1
RefSeq Size:	2612 bp
RefSeq ORF:	1479 bp
Locus ID:	140742
UniProt ID:	P58006
Cytogenetics:	10 22.77 cM

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Gene Summary: Functions as an intracellular leucine sensor that negatively regulates the TORC1 signaling pathway through the GATOR complex. In absence of leucine, binds the GATOR subcomplex GATOR2 and prevents TORC1 signaling. Binding of leucine to SESN2 disrupts its interaction with GATOR2 thereby activating the TORC1 signaling pathway (PubMed:25259925). This stress-inducible metabolic regulator may also play a role in protection against oxidative and genotoxic stresses. May positively regulate the transcription by NFE2L2 of genes involved in the response to oxidative stress by facilitating the SQSTM1-mediated autophagic degradation of KEAP1. May have an alkylhydroperoxide reductase activity born by the N-terminal domain of the protein. Was originally reported to contribute to oxidative stress resistance by reducing PRDX1. However, this could not be confirmed (By similarity).[UniProtKB/Swiss-Prot Function]