

Product datasheet for **SC207438**

G protein beta subunit like (MLST8) (NM_022372) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones
Product Name: G protein beta subunit like (MLST8) (NM_022372) Human 3' UTR Clone
Symbol: G protein beta subunit like
Synonyms: GbetaL; GBL; LST8; POP3; WAT1
Mammalian Cell Selection: Neomycin
Vector: pMirTarget (PS100062)
ACCN: NM_022372
Insert Size: 606 bp
Insert Sequence: >SC207438 3'UTR clone of NM_022372
 The sequence shown below is from the reference sequence of NM_022372. The complete sequence of this clone may contain minor differences, such as SNPs.
 Blue=Stop Codon Red=Cloning site

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GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC
CTGGCCTTCAATGACAGTGTGCTGGGCTAGCCTGTGACCCCTCGGGACTGCCTGGTGCAAGTGGTGGCA
GCTGGAGGGACCCATGCAGCACCCAGGTCAGAGCAGACCCTCCCCTGCCGGCCTGCGCCAGCTGGACCT
GATGGCCCCCTGTGGCGCCTTGACCTGCTGGGCCAGGCTGCCCTGGGACTCTCAGCCCCCAGTTGCTTA
TCCAGATGTGACAGAGCTCGACCAAGCCAGGCTGCACACTCCTGGACTGGGCTAGCCTGCACTGCCTG
GGAAAGTCGGCCGAGGGCCAAAGCTGCTGAGGGGTCTGAGGCTGGTGCCACCCCAAGCTAGTGTGT
TCTCTGCCCTCCCTGCCCGCTTTCAGGGCCTCGGTCCATAGAGAACACCACCACCATGGCCAGGTGG
AAGGGTTTATTAGTCCCTGCCAGCAGCTGTCTCCCTGGTGCAGGTGGCCTGGCCAGCCCACTGGATTG
GGGACGGGCCAGGCTGGGCCAGGTCGGGGGCTCAGTCTGGGAGGTAATAAAAGCAGACCGACACGCAGA
TGTTGCTCGGGAAGCAGATGTCGATGCAGAGATAAATCAGCCGCTGTCTCCGGG
ACGCGTAAGCGGCCCGCGCATCTAGATTCGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA
CGAGATTCGATTCCACCGCCGCTTCTATGAAAGG
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Restriction Sites: Sgfl-MluI
OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences , e.g., single nucleotide polymorphisms (SNPs).



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Components:	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.
RefSeq:	NM_022372.6
Summary:	<p>Subunit of both mTORC1 and mTORC2, which regulates cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino acids. Growth factor-stimulated mTORC1 activation involves a AKT1-mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that potentially activates the protein kinase activity of mTORC1. Amino acid-signaling to mTORC1 requires its relocalization to the lysosomes mediated by the Ragulator complex and the Rag GTPases. Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. mTORC1 phosphorylates EIF4EBP1 and releases it from inhibiting the elongation initiation factor 4E (eIF4E). mTORC1 phosphorylates and activates S6K1 at 'Thr-389', which then promotes protein synthesis by phosphorylating PDCD4 and targeting it for degradation. Within mTORC1, LST8 interacts directly with MTOR and enhances its kinase activity. In nutrient-poor conditions, stabilizes the MTOR-RPTOR interaction and favors RPTOR-mediated inhibition of MTOR activity. mTORC2 is also activated by growth factors, but seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. [UniProtKB/Swiss-Prot Function]</p>
Locus ID:	64223
MW:	21