GbetaL Antibody – Rabbit Polyclonal

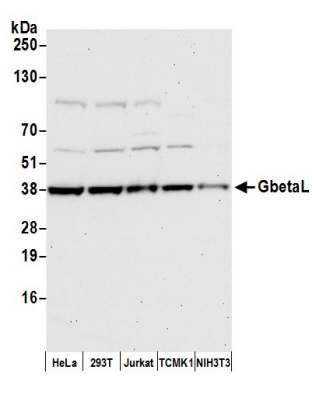
PRODUCT OVERVIEW

NCBI/Uniprot data below describe general gene information for GbetaL. It may not necessarily be applicable to this product.

Product Name	GbetaL, Polyclonal Antibody
Full Product Name	Rabbit anti-GbetaL Antibody, Affinity Purified
Product Gene Name	anti-GbetaL antibody
Product Synonym Gene Name	MLST8
Product Synonym Names	gable; POP3; WAT1; TORC subunit LST8; target of rapamycin complex subunit LST8; protein GbetaL; mLST8; mammalian lethal with SEC13 protein 8; LST8; GbetaL; G protein beta subunit-like; GBL; Target of rapamycin complex subunit LST8; MTOR associated protein, LST8 homolog
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Liquid. Whole IgG. Tris-citrate/phosphate buffer, pH 7 to 8 containing 0.09% Sodium Azide
Purity/Purification	Antigen Affinity Purified
Concentration	1000ug/ml (lot specific)
Preparation and Storage	Store at 2-8 degree C Shelf Life: 1 year from date of receipt
Chromosome Location	**chromosome:** 16; **Location:**
OMIM	612190
3D Structure	ModBase 3D Structure for Q9BVC4
Predicted Reactivity	Rat, Zebrafish, X. laevis, X. tropicalis, Bovine
Immunogen	Between 276 and C-terminus
Conjugation	Unconjugated
Product Categories/Family for anti-GbetaL antibody	Primary Antibodies
Applications Tested/Suitable for anti-GbetaL antibody	Western Blot (WB)
Application Notes for anti-GbetaL antibody	WB: 1:2000-1:10,000
Related Product Information for anti-GbetaL antibody	GbetaL (G-protein beta-subunit-like) is a member of the WD-repeat family of proteins that share a highly conserved tryptophan-aspartate repeating motif that mediates the assembly of multiprotein factors.
Other Notes	Small volumes of anti-GbetaL antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for GbetaL purchase	MBS3901214 is an antibody targeting GbetaL. Also known as Rabbit anti-GbetaL Antibody, Affinity Purified. Reactive in Human, Mouse. Host: Rabbit.
NCBI GI #	84626578

NCBI GeneID	64223
NCBI Accession #	NP_071767.3
UniProt Primary Accession #	Q9BVC4
UniProt Secondary Accession #	Q5M800; Q86Y18; Q8WUI5; Q9HA66; Q9UJV6; B3KMM4; B4DY00
NCBI Official Full Name	target of rapamycin complex subunit LST8 [Homo sapiens]
NCBI Official Synonym Full Names	MTOR associated protein, LST8 homolog (S. cerevisiae)
NCBI Official Symbol	MLST8
NCBI Official Synonym Symbols	GBL; LST8; POP3; WAT1; GbetaL; MGC111011; MLST8
UniProt Protein Name	Target of rapamycin complex subunit LST8
UniProt Synonym Protein Names	G protein beta subunit-like; Gable; Protein GbetaL; Mammalian lethal with SEC13 protein 8; mLST8
Protein Family	Target of rapamycin complex
UniProt Gene Name	MLST8
UniProt Synonym Gene Names	GBL; LST8; TORC subunit LST8; Gable; Protein GbetaL; mLST8
UniProt Entry Name	LST8_HUMAN
UniProt Comments for GbetaL	LST8: 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 potently 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'. Part of the mammalian target of rapamycin complex 1 (mTORC1) which contains MTOR, MLST8, RPTOR, AKT1S1/PRAS40 and DEPTOR. mTORC1 binds to and is inhibited by FKBP12-rapamycin. Part of the mammalian target of rapamycin complex 2 (mTORC2) which contains MTOR, MLST8, PRR5, RICTOR, MAPKAP1 and DEPTOR. Contrary to mTORC1, mTORC2 does not bind to and is not sensitive to FKBP12- rapamycin. Interacts directly with MTOR and RPTOR. Interacts with RHEB. Broadly expressed, with highest levels in skeletal muscle, heart and kidney. Belongs to the WD repeat LST8 family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Autophagy Chromosomal Location of Human Ortholog: 16p13.3 Cellular Component: nucleoplasm; cytoplasm; cytosol Molecular Function: protein binding Biological Process: epidermal growth factor receptor signaling pathway; positive regulation of peptidyl-tyrosine phosphorylation; phosphoinositide-mediated signaling; fibroblast growth factor receptor signaling pathway; positive regulation of actin filament polymerization; nerve growth factor receptor signaling pathway; regulation of actin cytoskeleton organization and biogenesis; T cell costimulation; insulin receptor signaling pathway; innate immune response; vascular endothelial growth factor receptor signaling pathway; positive regulation of TOR signaling pathway

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Western Blot (WB) of anti-GbetaL antibody
Detection of human and mouse GbetaL by western blot. Samples: Whole cell lysate (50 ug) from HeLa, HEK293T, Jurkat, mouse TCMK-1, and mouse NIH 3T3cells prepared using NETN lysis buffer. Antibody: Affinity purified rabbit anti-GbetaL antibody MBS3901214 (lot MBS3901214-3) used for WB at 0.4 ug/ml. Detection: Chemiluminescence with an exposure time of 30 seconds.

ADDITIONAL DETAILS

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