

Rabbit MLST8 Polyclonal Antibody | anti-MLST8 antibody

MLST8 Antibody

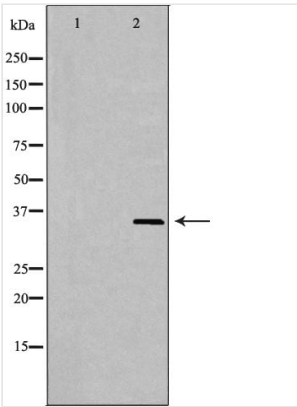
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325985	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MLST8; Polyclonal Antibody; MLST8 Antibody; G protein beta subunit like; G protein beta subunit-like; Gable; GbetaL; GBL; GBL protein; LST8; LST8_HUMAN; Mammalian lethal with SEC13 protein 8; MGC111011; mLST8; MTOR associated protein LST8 homolog (S. cerevisiae); POP3; POP3 homolog (S. pombe); Protein GbetaL; Target of rapamycin complex subunit LST8; TORC subunit LST8; WAT1; WAT1 homolog (S. pombe); anti-MLST8 antibody

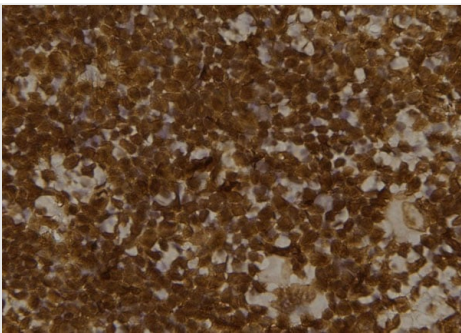
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MLST8 antibody detects endogenous levels of total MLST8
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	326
Applicable Applications for anti-MLST8 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MLST8
Subcellular Location	Cytoplasm.
Tissue Specificity	Broadly expressed, with highest levels in skeletal muscle, heart and kidney.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (90%), Bovine (100%), Sheep (100%), Rabbit (100%), Dog (90%), Chicken (90%), Xenopus (90%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)

Western blot analysis of Mouse brain lysate, using MLST8 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA325985 at 1/100 staining Mouse spleen tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-MLST8 antibody

Description: Cell growth is a fundamental biological process whereby cells accumulate mass and increase in size. The mammalian Target of Rapamycin (mTOR) pathway regulates growth by coordinating energy and nutrient signals with growth factor-derived signals (1). mTOR is a large protein kinase with two different complexes. One complex contains mTOR, GbetaL, and raptor, which is a target of rapamycin. The other complex, insensitive to rapamycin, includes mTOR, GbetaL, and rictor (1). GbetaL associates with the kinase domain of mTOR and stimulates mTOR kinase activity (2). A reduction in GbetaL expression has been shown to decrease in vivo phosphorylation of S6K1 (2).

Function: 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'.

Subunit Structure: 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.

Similarity: Belongs to the WD repeat LST8 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	312596910
NCBI GeneID	64223
NCBI Accession #	NP_001186102.1
NCBI GenBank Nucleotide #	NM_001199173.2

UniProt Accession #	Q9BVC4; Q5M800; Q86Y18; Q8WUI5; Q9HA66; Q9UJV6; B3KMM4; B4DY00; D3DU88
Molecular Weight	Observed: 36 kDa Predicted: 36 kDa
NCBI Official Full Name	target of rapamycin complex subunit LST8 isoform a
NCBI Official Synonym Full Names	MTOR associated protein, LST8 homolog
NCBI Official Symbol	MLST8
NCBI Official Synonym Symbols	GBL; LST8; POP3; WAT1; GbetaL
NCBI Protein Information	target of rapamycin complex subunit LST8
UniProt Protein Name	Target of rapamycin complex subunit LST8
UniProt Gene Name	MLST8
UniProt Synonym Gene Names	GBL; LST8; TORC subunit LST8; Gable; Protein GbetaL; mLST8

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/mlst8-antibody-immunohistochemistry-western-blot-elisa/325985>