

ARG57927 anti-MLST8 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MLST8
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MLST8
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-326 of Human MLST8 (NP_001186103.1).
Conjugation	Un-conjugated
Alternate Names	Gable; mLST8; Mammalian lethal with SEC13 protein 8; Protein GbetaL; GBL; LST8; TORC subunit LST8; WAT1; POP3; G protein beta subunit-like; Target of rapamycin complex subunit LST8; GbetaL

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	293T	
Observed Size	~ 40 kDa	

Properties

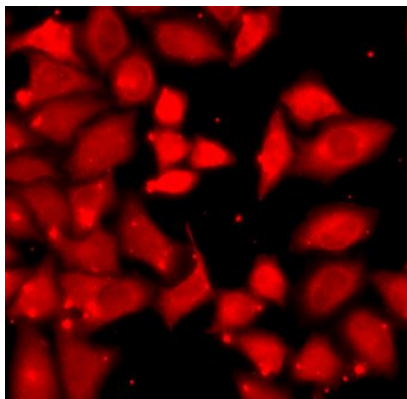
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

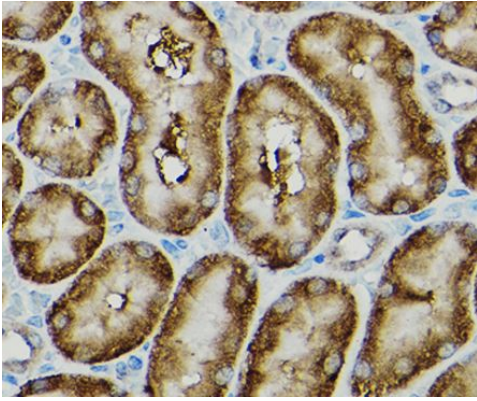
Gene Symbol	MLST8
Gene Full Name	MTOR associated protein, LST8 homolog
Function	<p>Subunit of both mTORC1 and mTORC2, which regulates cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino acids. Growth factor-stimulated mTORC1 activation involves a AKT1-mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that 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'. [UniProt]</p>
Highlight	<p>Related products: MLST8 antibodies; Anti-Rabbit IgG secondary antibodies;</p> <p>Related news: Baking soda restores circadian clock in tumor cells</p>
Calculated Mw	36 kDa
Cellular Localization	Cytoplasm. [UniProt]

Images



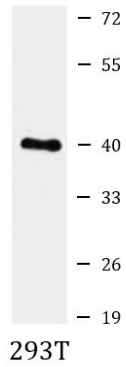
ARG57927 anti-MLST8 antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG57927 anti-MLST8 antibody.



ARG57927 anti-MLST8 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue stained with ARG57927 anti-MLST8 antibody at 1:100 dilution.



ARG57927 anti-MLST8 antibody WB image

Western blot: 25 µg of 293T cell lysate stained with ARG57927 anti-MLST8 antibody at 1:1000 dilution.