SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-Lysyl tRNA synthetase antibody

SL6127R

Product Name:	Lysyl tRNA synthetase
Chinese Name:	赖氨酸tRNA的连接酶抗体
Alias:	KARS 2; KARS; KARS2; KIAA0070; KRS; Lysine tRNA ligase; Lysine--tRNA ligase; LysRS; Lysyl-tRNA synthetase; SYK_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	54kDa
Cellular localization:	The nucleuscytoplasmicThe cell membraneExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KARS2/Lysyl tRNA synthetase:301-400/482
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA. When secreted, acts as a signaling molecule that induces immune response through the activation of monocyte/macrophages. Catalyzes the synthesis of diadenosine oligophosphate (Ap4A), a signaling molecule

	involved in the activation of MITF transcriptional activity. Interacts with HIV-1 virus GAG protein, facilitating the selective packaging of tRNA(3)(Lys), the primer for reverse transcription initiation. **Function:** Negative regulator in the hedgehog signaling pathway. Down-regulates GLI1-mediated transactivation of target genes. Part of a corepressor complex that acts on DNA-bound GLI1. May also act by linking GLI1 to BTRC and thereby targeting GLI1 to degradation by the proteasome. Sequesters GLI1, GLI2 and GLI3 in the cytoplasm, this effect is overcome by binding of STK36 to both SUFU and a GLI protein. Negative regulator of beta-catenin signaling. Regulates the formation of either the repressor form (GLI3R) or the activator form (GLI3A) of the full length form of GLI3 (GLI3FL). GLI3FL is complexed with SUFU in the cytoplasm and is maintained in a neutral state. Without the Hh signal, the SUFU-GLI3 complex is recruited to cilia, leading to the efficient processing of GLI3FL into GLI3R. When Hh signaling is initiated, SUFU dissociates from GLI3FL and the latter translocates to the nucleus, where it is phosphorylated, destabilized, and converted to a transcriptional activator (GLI3A). **Subunit:** May form homodimers. Part of a DNA-bound corepressor complex containing SAP18, GLI1 and SIN3. Part of a complex containing CTNNB1. Binds BTRC, GLI2, GLI3, SAP18 and STK36. Binds both free and DNA-bound GLI1. Interacts with KIF7. Interacts with GLI3FL and this interaction regulates the formation of either repressor or activator forms of GLI3. Its association with GLI3FL is regulated by Hh signaling and dissociation of the SUFU-GLI3 interaction requires the presence of the ciliary motor KIF3A (By similarity). Interacts with ULK3; inactivating the protein kinase activity of ULK3. Interacts with RAB23. **Subcellular Location:** Cytoplasm. Nucleus. **Tissue Specificity:** Ubiquitous in adult tissues. Detected in osteoblasts of the perichondrium in the developing limb of 12-week old embryos. Isoform 1 is detected in fetal brain, lung, kidney and testis. Isoform 2 is detected in fetal testis, and at much lower levels in fetal brain, lung and kidney. **DISEASE:** Medulloblastoma (MDB) [MIM:155255]: Malignant, invasive embryonal tumor of the cerebellum with a preferential manifestation in children. Note=The disease is caused by mutations affecting the gene represented in this entry. **Similarity:** Belongs to the SUFU family. **SWISS:**

	Q9UMX1 **Gene ID:** 3735 **Database links:** Entrez Gene: 3735Human Entrez Gene: 85305Mouse Omim: 601421Human SwissProt: Q15046Human SwissProt: Q99MN1Mouse Unigene: 3100Human Unigene: 196544Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.