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LysRS Antibody

Rabbit mAb
Catalog # AP91995

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	Q15046
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	CMTRIB; KARS; KARS1; KARS2; KRS; Lysine tRNA ligase; LysRS;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	68048

Additional Information

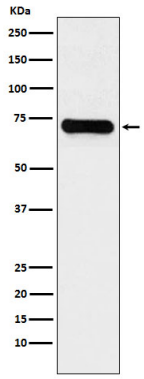
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human LysRS
Description	Catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	KARS1 (HGNC:6215)
Synonyms	KARS, KIAA0070
Function	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 (PubMed:18029264, PubMed:18272479, PubMed:9278442). When secreted, acts as a signaling molecule that induces immune response through the activation of monocyte/macrophages (PubMed:15851690). Catalyzes the synthesis of the signaling molecule diadenosine tetraphosphate (Ap4A), and thereby mediates disruption of the complex between HINT1 and MITF and the concomitant activation of MITF transcriptional activity (PubMed:14975237, PubMed:19524539, PubMed:23159739, PubMed:5338216).
Cellular Location	[Isoform Cytoplasmic]: Cytoplasm, cytosol. Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Secreted Note=Secretion is induced by TNF-alpha (PubMed:15851690). Cytosolic in quiescent mast cells.

Translocates into the nucleus in response to mast cell activation by immunoglobulin E (PubMed:23159739)

Images



Western blot analysis of LysRS expression in Jurkat cell lysate.