

LysRS Monoclonal Antibody

Catalog No :	YM0425
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	LysRS
Fields :	>>Aminoacyl-tRNA biosynthesis
Gene Name :	KARS
Protein Name :	Lysyl-tRNA synthetase
Human Gene Id :	3735
Human Swiss Prot No :	Q15046
Mouse Swiss Prot No :	Q99MN1
Immunogen :	Purified recombinant fragment of LysRS(aa90-174) expressed in E. Coli.
Specificity :	LysRS Monoclonal Antibody detects endogenous levels of LysRS protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	68kD
Cell Pathway :	Aminoacyl-tRNA biosynthesis;

P References :

1. J Biol Chem. 2000 Nov 10;275(45):35063-9.
2. J Virol. 2001 Jun;75(11):5043-8.
3. Biochem Biophys Res Commun. 2002 Feb 15;291(1):158-64.
4. Cell. 2004 Oct 15;119(2):195-208.

Background :

Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. Lysyl-tRNA synthetase is a homodimer localized to the cytoplasm which belongs to the class II family of tRNA synthetases. It has been shown to be a target of autoantibodies in the human autoimmune diseases, polymyositis or dermatomyositis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

Function :

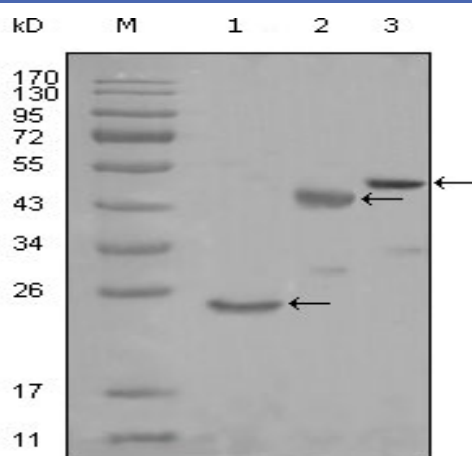
catalytic activity:ATP + L-lysine + tRNA(Lys) = AMP + diphosphate + L-lysyl-tRNA(Lys).,similarity:Belongs to the class-II aminoacyl-tRNA synthetase family.,subunit:Homodimer (By similarity); also part of a multisubunit complex that groups tRNA ligases for Arg, Asp, Glu, Gln, Ile, Leu, Lys, Met and Pro.,

Subcellular Location :

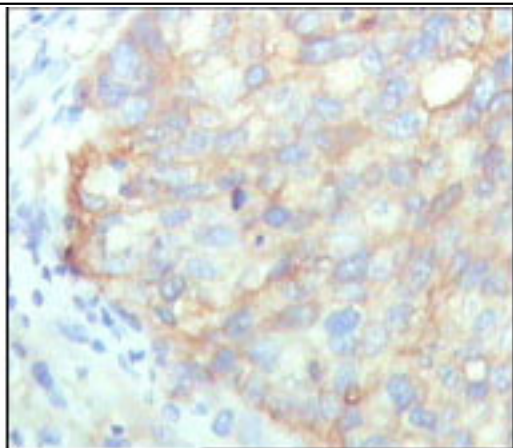
[Isoform Cytoplasmic]: Cytoplasm, cytosol . Cytoplasm . Nucleus . Cell membrane ; Peripheral membrane protein . Secreted . Secretion is induced by TNF-alpha (PubMed:15851690). Cytosolic in quiescent mast cells. Translocates into the nucleus in response to mast cell activation by immunoglobulin E (PubMed:23159739). .; [Isoform Mitochondrial]: Mitochondrion .

Expression :

Bone marrow,Brain,Cerebellum,Hepatoma,Placenta,

Products Images

Western Blot analysis using LysRS Monoclonal Antibody against truncated Trx-LysRS recombinant protein (1), truncated MBP-LysRS (aa90-174) and full length LysRS (aa1-188) transfected CHO-K1 cell lysate (3).



Immunohistochemistry analysis of paraffin-embedded human cervical carcinoma, showing cytoplasmic localization with DAB staining using LysRS Monoclonal Antibody.