

LysRS Monoclonal Antibody

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|------------------------------|---|
| 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 :

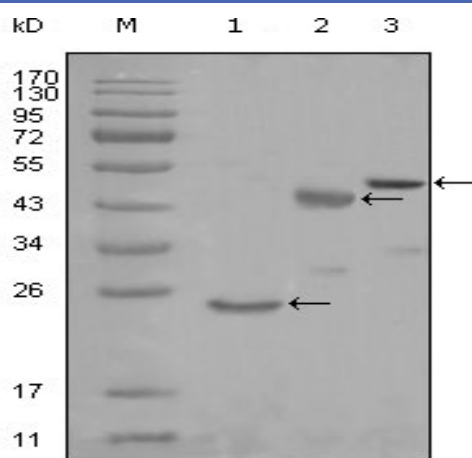
catalytic activity:ATP + L-lysine + tRNA(Lys) = AMP + diphosphate + L-lysyl-tRNA(Lys).,similarity:Belongs to the class-II aminoacyl-tRNA synthetase family.,subunit:Homodimer (By similarity); also part of a multisubunit complex that groups tRNA ligases for Arg, Asp, Glu, Gln, Ile, Leu, Lys, Met and Pro.,

Subcellular Location :

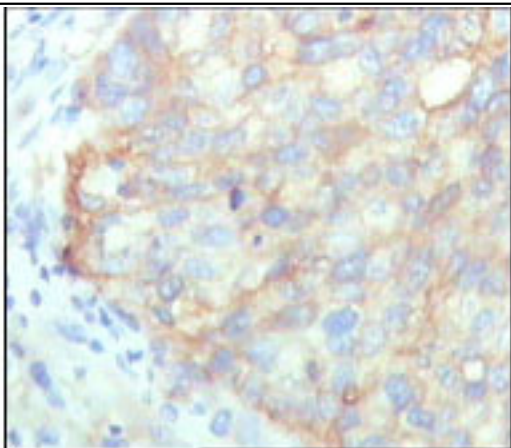
[Isoform Cytoplasmic]: Cytoplasm, cytosol . Cytoplasm . Nucleus . Cell membrane ; Peripheral membrane protein . Secreted . Secretion is induced by TNF-alpha (PubMed:15851690). Cytosolic in quiescent mast cells. Translocates into the nucleus in response to mast cell activation by immunoglobulin E (PubMed:23159739).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