

## **LysRS Monoclonal Antibody**

Catalog No: YM0425

Reactivity: Human

**Applications:** WB;IHC;IF;ELISA

Target: LysRS

**Fields:** >>Aminoacyl-tRNA biosynthesis

Q15046

Q99MN1

Gene Name: KARS

Protein Name: Lysyl-tRNA synthetase

Human Gene Id: 3735

**Human Swiss Prot** 

Idiliali Swiss Fiot

No:

**Mouse Swiss Prot** 

No:

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;

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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,

Sort:

9312

No4:

1

Host:

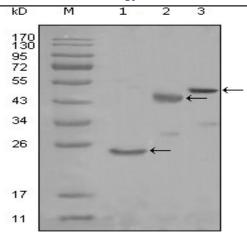
Mouse

**Modifications:** 

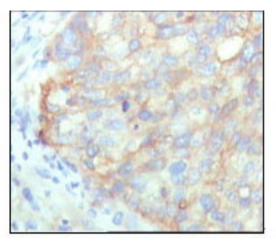
Unmodified

## **Products Images**

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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.