

# KARS Rabbit mAb

Catalog # AP78094

### **Product Information**

**Application** WB, IHC-P, IF, ICC, IP

Primary Accession <u>Q15046</u>

**Reactivity** Rat, Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human LysRS

**Purification** Affinity Chromatography

Calculated MW 68048

### **Additional Information**

**Gene ID** 3735

Other Names KARS1

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

#### **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

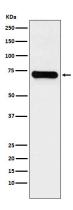
monocyte/macrophages (PubMed:<u>15851690</u>). Catalyzes the synthesis of the signaling molecule diadenosine tetraphosphate (Ap4A), and thereby mediates disruption of the complex between HINT1 and MITF and the concomitant

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**



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