10320 Camino Santa Fe, Suite G
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Goat Anti-RARS Antibody

Peptide-affinity purified goat antibody
Catalog # AF2229a

Specification

Goat Anti-RARS Antibody - Product Information

Application	**WB, Pep-ELISA**
Primary Accession	P54136
Other Accession	NP_002878, 5917, 104458 (mouse), 287191 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**75379**

Goat Anti-RARS Antibody - Additional Information

Gene ID 5917

Other Names
Arginine--tRNA ligase, cytoplasmic, 6.1.1.19, Arginyl-tRNA synthetase, ArgRS, RARS

Dilution
WB~~1:1000
Pep-ELISA~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-RARS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-RARS Antibody - Protein Information

Name RARS1 (HGNC:9870)

Synonyms RARS

Function
Forms part of a macromolecular complex that catalyzes the attachment of specific amino acids to cognate tRNAs during protein synthesis (PubMed:25288775). Modulates the secretion of AIMP1 and may be involved in generation of the inflammatory cytokine EMAP2 from AIMP1 (PubMed:17443684).

Cellular Location
Cytoplasm. Cytoplasm, cytosol

Goat Anti-RARS Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-RARS Antibody - Images

AF2229a (1 µg/ml) staining of HepG2 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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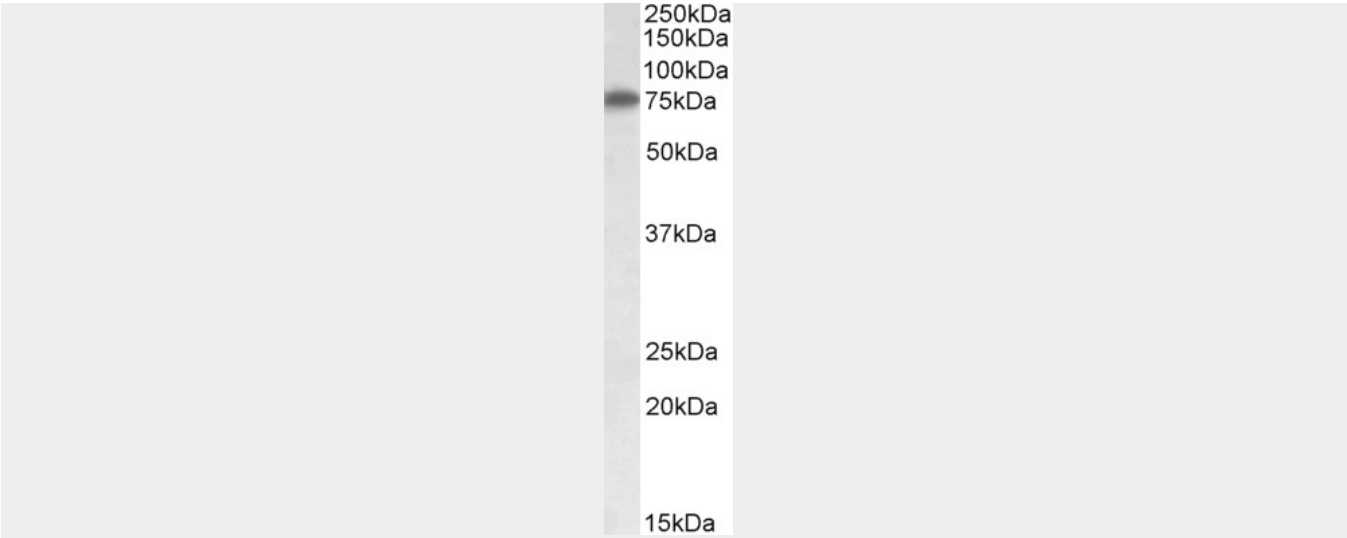

EB09780 (1µg/ml) staining of HepG2 lysate (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-RARS Antibody - Background

Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Arginyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family.

Goat Anti-RARS Antibody - References

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.
Proteasomes and RARS modulate AIMP1/EMAP II secretion in human cancer cell lines. Bottoni A, et al. J Cell Physiol, 2007 Aug. PMID 17443684.
Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.
Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.
The C-terminal appended domain of human cytosolic leucyl-tRNA synthetase is indispensable in its interaction with arginyl-tRNA synthetase in the multi-tRNA synthetase complex. Ling C, et al. J Biol Chem, 2005 Oct 14. PMID 16055448.