

**Goat Anti-RARS Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2229a****Specification**

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**Goat Anti-RARS Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P54136</a>
Other Accession	<a href="#">NP_002878</a> , <a href="#">5917</a> , <a href="#">104458 (mouse)</a> , <a href="#">287191 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Cow
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

**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:&lt;a href="http://www.uniprot.org/citations/25288775" target="\_blank"&gt;25288775&lt;/a&gt;). Modulates

the secretion of AIMP1 and may be involved in generation of the inflammatory cytokine EMAP2 from AIMP1 (PubMed:<a href="http://www.uniprot.org/citations/17443684" target="\_blank">17443684</a>).

#### Cellular Location

Cytoplasm. Cytoplasm, cytosol

#### Goat Anti-RARS Antibody - Protocols

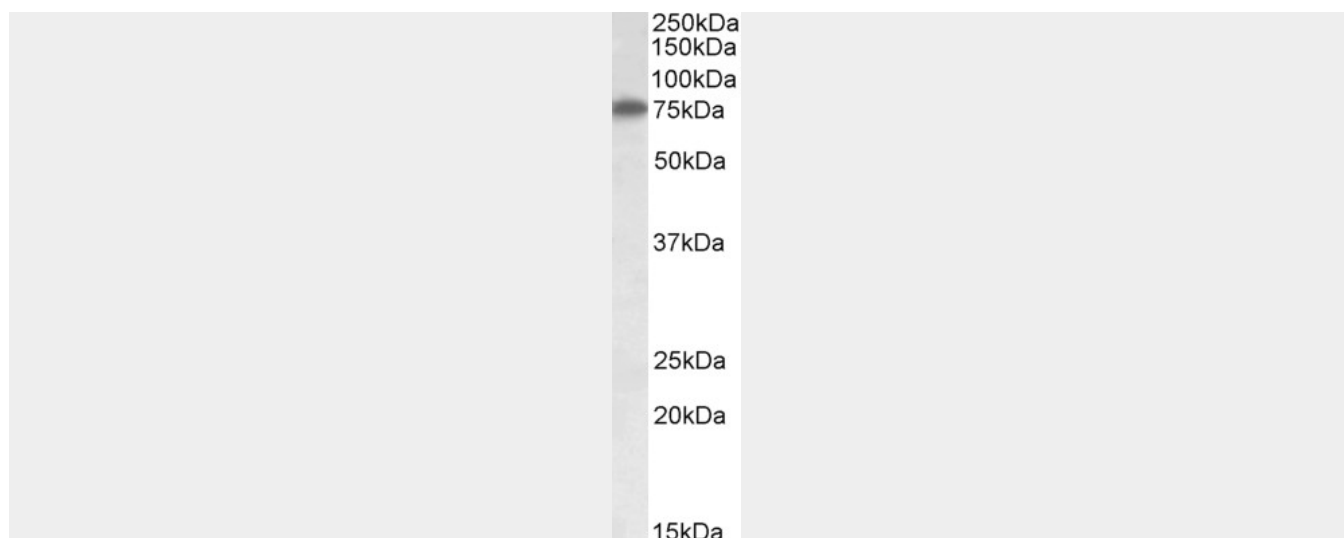
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.



EB09780 (1 $\mu$ g/ml) staining of HepG2 lysate (35 $\mu$ g 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.