


## Product datasheet

### Anti-AlaRS antibody [EPR11036(B)] ab166915

Recombinant RabMAb

3 Images

#### Overview

Product name	Anti-AlaRS antibody [EPR11036(B)]
Description	Rabbit monoclonal [EPR11036(B)] to AlaRS
Host species	Rabbit
Tested applications	<b>Suitable for:</b> Flow Cyt (Intra), WB <b>Unsuitable for:</b> ICC/IF, IHC-P or IP
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HeLa, K562, Human fetal liver and HepG2 cell lysate. Permeabilized K562 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR11036(B)

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab166915 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Predicted molecular weight: 107 kDa.

### Application notes

Is unsuitable for ICC/IF, IHC-P or IP.

## Target

### Function

Catalyzes the attachment of alanine to tRNA(Ala) in a two-step reaction: alanine is first activated by ATP to form Ala-AMP and then transferred to the acceptor end of tRNA(Ala). Also edits incorrectly charged tRNA(Ala) via its editing domain.

### Involvement in disease

Charcot-Marie-Tooth disease 2N

### Sequence similarities

Belongs to the class-II aminoacyl-tRNA synthetase family.

### Domain

Consists of three domains; the N-terminal catalytic domain, the editing domain and the C-terminal C-Ala domain. The editing domain removes incorrectly charged amino acids, while the C-Ala domain, along with tRNA(Ala), serves as a bridge to cooperatively bring together the editing and aminoacylation centers thus stimulating deacylation of misacylated tRNAs. The C-terminal C-Ala domain (residues 756 to 968), along with tRNA(Ala), serves as a bridge to cooperatively bring together the editing and aminoacylation centers thus stimulating deacylation of misacylated tRNAs. The human domain can be used in vitro to replace the corresponding domain in E.coli.

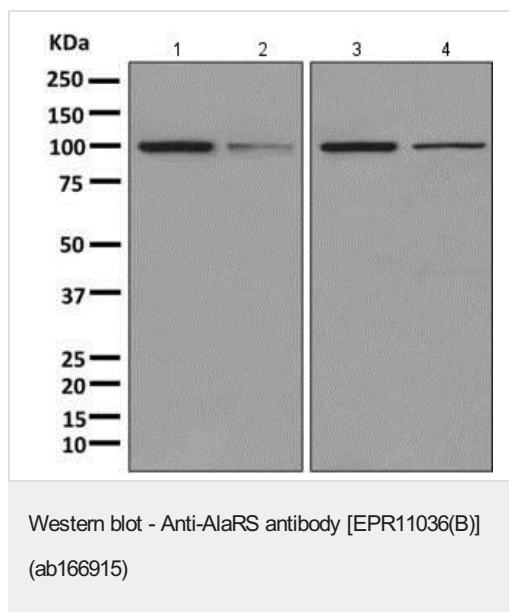
### Post-translational modifications

ISGylated.

### Cellular localization

Cytoplasm.

## Images



**All lanes :** Anti-AlaRS antibody [EPR11036(B)] (ab166915) at 1/10000 dilution

**Lane 1 :** HeLa cell lysate

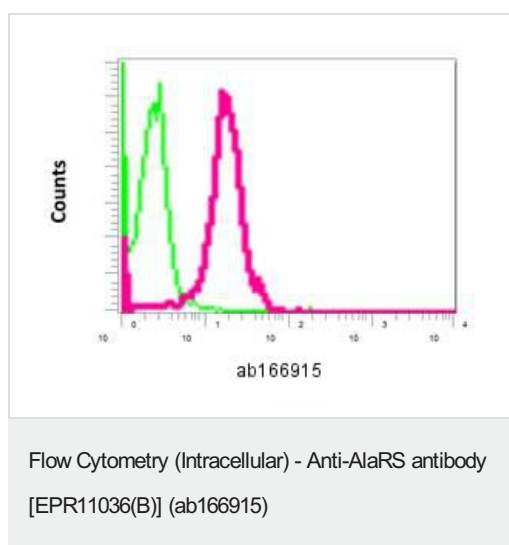
**Lane 2 :** Human fetal liver tissue lysate

**Lane 3 :** K562 cell lysate

**Lane 4 :** HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 107 kDa



Intracellular flow cytometric analysis of permeabilized K562 cells labeling AlaRS with ab166915 at 1/10 (red) or a rabbit IgG control (negative) (green).

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-AlaRS antibody [EPR11036(B)] (ab166915)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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