

## Product datasheet

# Anti-AlaRS antibody - N-terminal ab71289

[2 Images](#)

### Overview

<b>Product name</b>	Anti-AlaRS antibody - N-terminal
<b>Description</b>	Rabbit polyclonal to AlaRS - N-terminal
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Positive control</b>	K562 cell line lysates.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.09% Sodium Azide Constituents: PBS
<b>Purity</b>	Ammonium Sulphate Precipitation
<b>Purification notes</b>	ab71289 is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab71289** in the following tested applications.

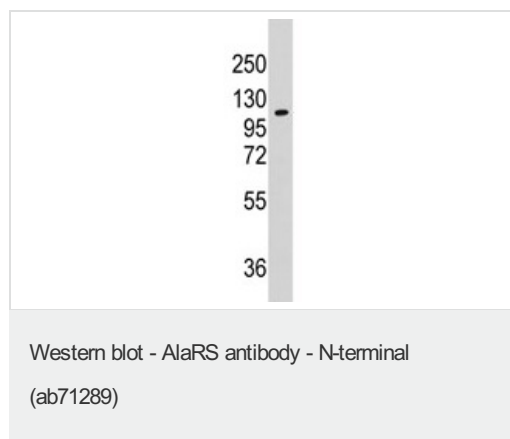
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		1/1000.
WB		1/50 - 1/100. Detects a band of approximately 107 kDa (predicted molecular weight: 107 kDa).
IHC-P		1/10 - 1/50.

## Target

<b>Function</b>	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.
<b>Involvement in disease</b>	Charcot-Marie-Tooth disease 2N
<b>Sequence similarities</b>	Belongs to the class-II aminoacyl-tRNA synthetase family.
<b>Domain</b>	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.
<b>Post-translational modifications</b>	ISGylated.
<b>Cellular localization</b>	Cytoplasm.

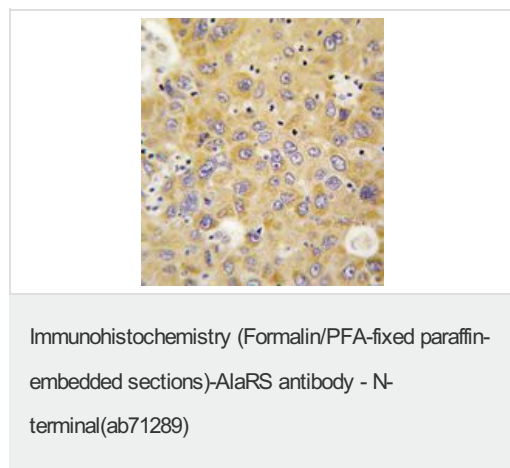
## Images



Anti-AlaRS antibody - N-terminal (ab71289) at 1/60 dilution + K562 cell line lysate at 35 µg

**Predicted band size** : 107 kDa

**Observed band size** : 107 kDa



ab71289 at 1/50 dilution staining AlaRS N-terminal in human hepatocarcinoma tissue section by Immunohistochemistry (Formalin/PFA fixed paraffin-embedded sections). A peroxidase conjugated secondary antibody was used followed by DAB staining.

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