

### Product datasheet

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# ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes AlaRS / Alanyl tRNA Synthetase

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name AlaRS / Alanyl tRNA Synthetase

Species Human

Immunogen Synthetic peptide within a.a. 1-150 of Human Alanyl-tRNA Synthetase.

Conjugation Un-conjugated

Alternate Names Renal carcinoma antigen NY-REN-42; CMT2N; EIEE29; AlaRS; EC 6.1.1.7; Alanine--tRNA ligase,

cytoplasmic; Alanyl-tRNA synthetase

#### **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	WB: HeLa cell lysates; IHC: Human lung cancer tissue.	
Observed Size	110-120 kDa	

#### **Properties**

Form	Liquid
Purification	Affinity purified.
Buffer	PBS, 0.01% Thiomersal and 50% Glycerol.

Preservative 0.01% Thiomersal
Stabilizer 50% Glycerol

Concentration Batch dependent

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol AARS

Gene Full Name alanyl-tRNA synthetase

Background The human alanyl-tRNA synthetase (AARS) belongs to a family of tRNA synthases, of the class II

enzymes. Class II tRNA synthases evolved early in evolution and are highly conserved. This is reflected by the fact that 498 of the 968-residue polypeptide human AARS shares 41% identity witht the E.coli protein. tRNA synthases are the enzymes that interpret the RNA code and attach specific aminoacids to the tRNAs that contain the cognate trinucleotide anticodons. They consist of a catalytic domain which interacts with the amino acid acceptor-T psi C helix of the tRNA, and a second domain which interacts

with the rest of the tRNA structure. [provided by RefSeq, Jul 2008]

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

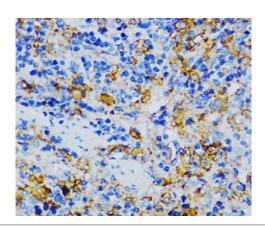
tRNA(Ala) via its editing domain. [UniProt]

Calculated Mw 107 kDa

PTM ISGylated. [UniProt]

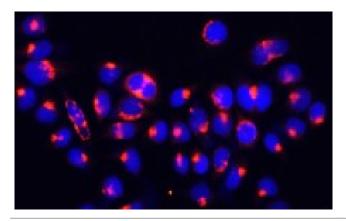
Cellular Localization Cytoplasm [UniProt]

#### **Images**



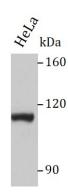
### ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human Lung tissue stained with ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody at 1:100 dilution.



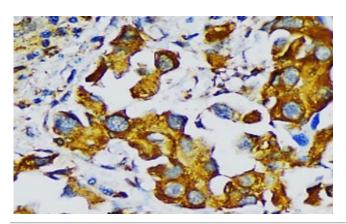
### ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody ICC/IF image

Immunofluorescence: 293T cells were stained with ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody at 1:100.



### ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody IHC-P image WB image

Western blot: HeLa cell lysates stained with ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody at 1:3000 dilution



## ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Rat Spleen tissue stained with ARG43659 anti-AlaRS / Alanyl tRNA Synthetase antibody at 1:100 dilution.