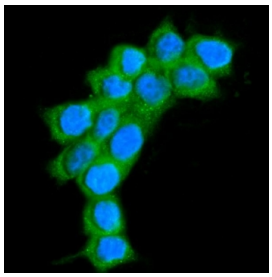
AlaRS Antibody / Alanyl-tRNA synthetase / AARS1 (RQ7963)

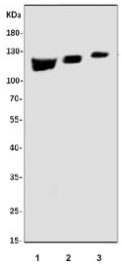
Catalog No.	Formulation	Size
RQ7963	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

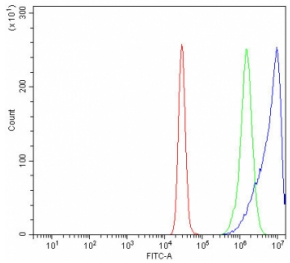
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P49588
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This AlaRS antibody is available for research use only.



Immunofluorescent staining of FFPE human MCF7 cells with AlaRS antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) K562, 2) HepG2 and 3) HeLa cell lysate with AlaRS antibody. Predicted molecular weight ~107 kDa.



Flow cytometry testing of human K562 cells with AlaRS antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= AlaRS antibody.

Description

An aminoacyl-tRNA synthetase (AlaRS, aaRS or ARS), also called tRNA-ligase, is an enzyme that attaches the appropriate amino acid onto its corresponding tRNA. 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.

Application Notes

Optimal dilution of the AlaRS antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids R729-N968) was used as the immunogen for the AlaRS antibody.

Storage

After reconstitution, the AlaRS antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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