Anti-AlaRS (Alanine-tRNA Ligase) antibody, rabbit serum

Product code	70-600
Size	100 µl
Storage	Store 4℃ for short term For long term storage store at -20℃. Aliquot to avoid repeated freezing and thawing.
Concentration	N/A
Buffer	0.05% sodium azide
Purity	Rabbit antiserum
Immunogen	Purified recombinant hamster AlaRS protein (695-969) fused with GST
Isotype	Rabbit IgG
Reactivity	Human, hamster, and mouse AlaRS
Special notes	N/A
Application	1. Western blotting (100~ 1,000 folds dilution) 2. Immunofluorescence staining (1/100)
Background	AlaRS (968 amino acids, 106.7 kDa), Alanine-tRNA ligase, is an important enzyme that catalyzes addition of alanine to tRNA in protein synthesis, utilizing ATP hydrolysis. AlaRS contains three domains; the N-terminal catalytic domain, the editing domain and the C-terminal C-Ala domain. Also edits incorrectly charged tRNA(Ala) via its editing domain.
Data Link	UniProtKB/Swiss-Prot: Q8CFX8 (SYAC_MESAU)

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Data Images: 70-600 Anti-AlaRS (Alanine-tRNA Ligase) antibody, rabbit serum

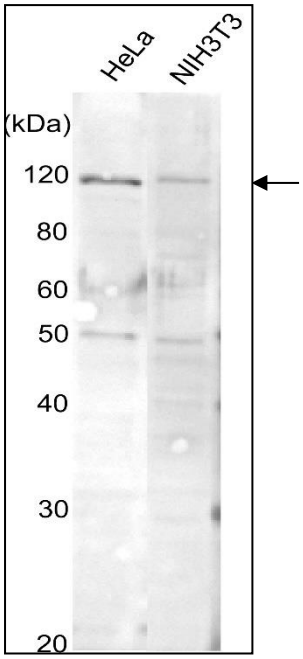

Fig.1 Detection of endogenous AlaRS protein in whole cell extracts by Western blotting with this antibody.

HeLa and NIH3T3 lyates (10 µg). The anti-AlaRS antiserum was used at 1/300 dilution.

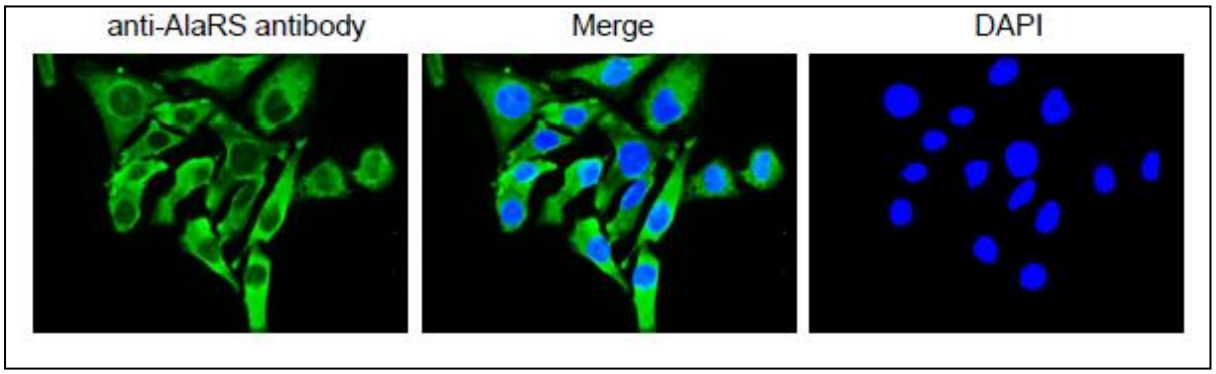

Fig.2 Immunofluorescence staining of AlaRS protein in HeLa cells by using anti-AlaRS antibody.

The cells were fixed with 4% paraformaldehyde and permeabilized with 0.25% TritonX100.
The antibody was used at 1/100 dilution. As the second antibody, Alexa Fluor 488 conjugated goat anti-rabbit IgG antibody was used at 1/1,000 dilution. Nuclear DNA was stained with DAPI (left) and the merged image was shown in the center.

Reference: This antibody was used in the following publication.

1. Wang Y et. al. "A hamster temperature-sensitive alanyl-tRNA synthase mutant causes degradation of cell cycle related proteins and apoptosis" J Biochemistry (Tokyo) 135, 7-16 (2004) PMID: 14999004 (WB)

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