

## Anti-AlaRS (Alanine-tRNA Ligase) antibody, rabbit polyclonal

Cat.#70- 600, Size:100 ul

### 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.

### Specifications:

**Immunogen:** Recombinant hamster AlaRS protein (695-969) fused with GST

**Form:** Anti-AlaRS rabbit serum added with 0.05% sodium azide

**Reactivity:** Reacts with human, hamster, and mouse AlaRS

**Storage:** Shipped at 4°C and store at -20°C

### Applications

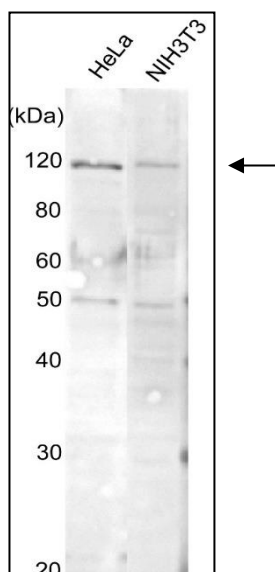
- Western blotting (100~ 1,000 folds dilution)
- Immunofluorescence staining (1/100)

Not tested for other applications

**Data Link** UniProtKB/Swiss-Prot: [Q8CFX8](#) (SYAC\_MESAU)

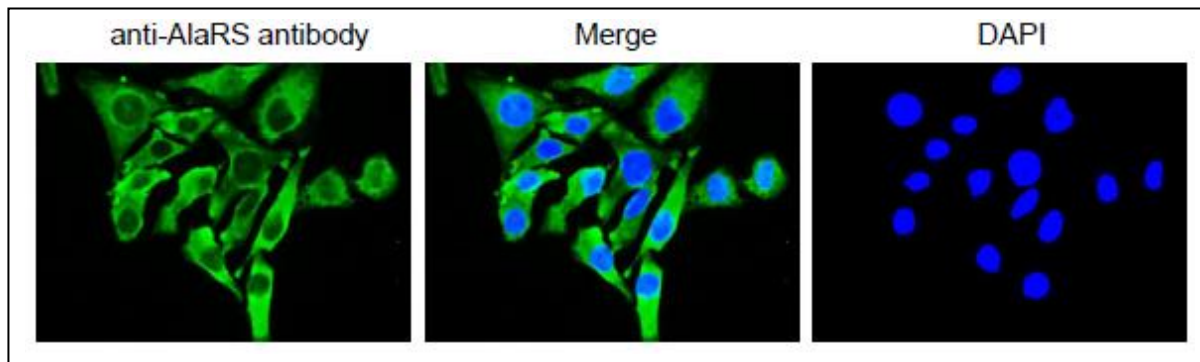
**Reference:** This antibody was used in the following publication.

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)



**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.

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**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.