

## Product datasheet for **TA322249**

### Alanyl tRNA synthetase 2 (AARS2) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: SP20 cells IHC: 50-200 Positive control: Human lymphoma Predicted cell location: Cytoplasm
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein corresponding to a region derived from 686-985 amino acids of human alanyl-tRNA synthetase 2, mitochondrial
Formulation:	PBS pH7.3, 0.05% NaN <sub>3</sub> , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	107 kDa
Gene Name:	alanyl-tRNA synthetase 2, mitochondrial
Database Link:	<a href="#">NP_065796</a> <a href="#">Entrez Gene 224805 Mouse</a> <a href="#">Entrez Gene 301254 Rat</a> <a href="#">Entrez Gene 57505 Human</a> <a href="#">Q5J TZ9</a>



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**Background:**

The protein encoded by this gene belongs to the class-II aminoacyl-tRNA synthetase family. Aminoacyl-tRNA synthetases play critical roles in mRNA translation by charging tRNAs with their cognate amino acids. The encoded protein is a mitochondrial enzyme that specifically aminoacylates alanyl-tRNA. Mutations in this gene are a cause of combined oxidative phosphorylation deficiency 8. 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

**Synonyms:**

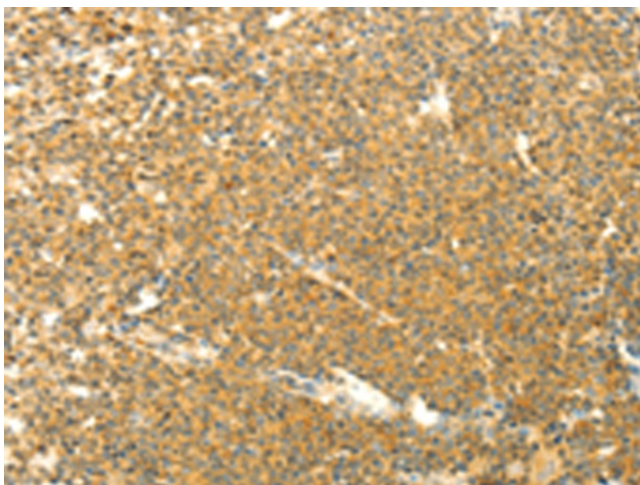
AARSL; COXPD8; LKENP; MT-ALARS; MTALARS

**Protein Pathways:**

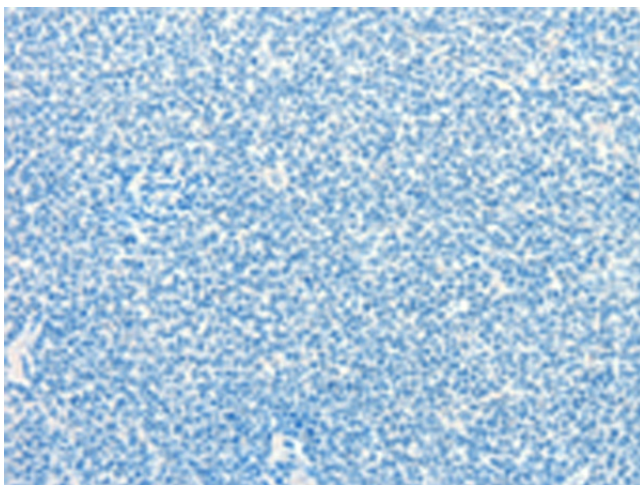
Aminoacyl-tRNA biosynthesis

**Product images:**

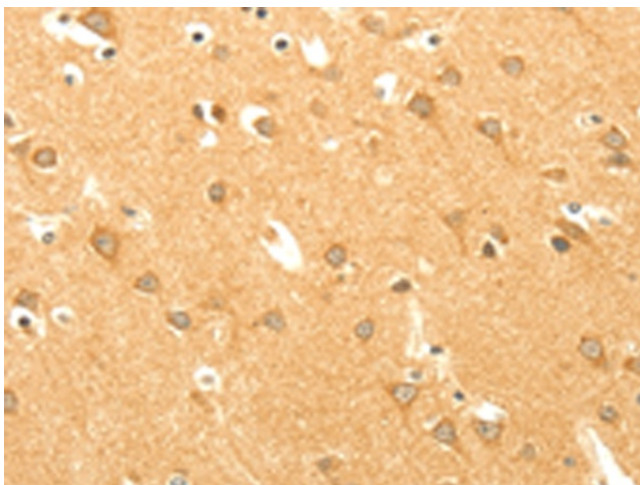
Gel: 8%SDS-PAGE  
Lysate: 40 µg  
Lane: SP20 cells  
Primary antibody: TA322249 (AARS2 Antibody) at dilution 1/600  
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution  
Exposure time: 15 seconds



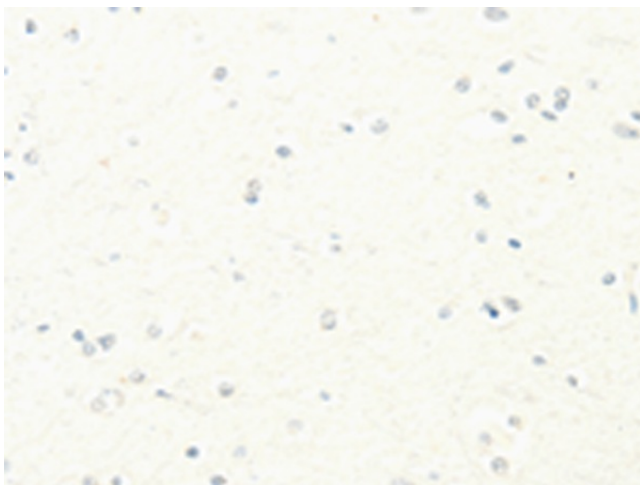
Immunohistochemistry of paraffin-embedded Human lymphoma tissue using TA322249 (AARS2 Antibody) at dilution 1/40 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human lymphoma tissue using TA322249 (AARS2 Antibody) at dilution 1/40, treated with fusion protein. (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human brain tissue using TA322249 (AARS2 Antibody) at dilution 1/40 (Original magnification:  $\times 200$ )



Immunohistochemistry of paraffin-embedded Human brain tissue using TA322249 (AARS2 Antibody) at dilution 1/40, treated with fusion protein. (Original magnification:  $\times 200$ )