

## **AARS**

## Recombinant Human Alanyl-tRNA Synthetase His

Catalog No. CSI10694 Quantity: 5 μg

CSI10695 20 μg CSI10696 1.0 mg

Alternate Names: Alanyl-tRNA synthetase cytoplasmic, Alanine-tRNA ligase, AlaRS, Renal carcinoma

antigen NY-REN-42, PL-12, AARS.

**Description:** Alanyl-tRNA synthetase is a member of the aminoacyl-tRNA synthetase family, key

enzymes that interpret the RNA code and attach specific amino acids to the tRNAs that contain the cognate trinucleotide anticodons. The AARS protein is an autoantigen recognized by PL-12 antibodies which occur in a subset of patients with polymyositis and

dermatomyositis. Preliminary data suggest that epitope spreading occurs in the autoimmune PL-12 response such that even antibodies to an isolated alanyl-tRNA

molecule can develop.

Recombinant Human Alanyl-tRNA Synthetase produced in Sf9 cells is a glycosylated, polypeptide chain having a molecular mass of 107.6 kDa. It is expressed with a -6x His

tag and purified by proprietary chromatographic techniques.

**Physical Appearance:** Sterile Filtered clear solution.

Gene ID: 16

Source: Sf9 insect cells

Molecular Mass: 107.6 kDa

Formulation: AARS is supplied in 16 mM HEPES buffer, pH 8, + 250 mM sodium chloride + 20%

glycerol.

**Purity:** Greater than 90% as determined by SDS-PAGE.

**Applications:** 1. Binds IgG-type human auto-antibodies.

2. Standard ELISA test (checker-board analysis of positive/negative sera panels immunodot test). Coating concentration: 0.3-0.8 µg/ml (depending on the type of ELISA plate and

E-mail: <u>info@cellsciences.com</u>
Website: www.cellsciences.com

coating buffer).

3. Suitable for biotinylation and iodination.

4. Western-Blot with monoclonal anti-hexa-His-tag antibody & Polymyositis sera.

Storage & Stability: Store at 2-4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for

Toll Free: 888-769-1246

Phone: 781-828-0610

Fax: 781-828-0542

longer periods of time. Avoid multiple freeze-thaw cycles.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.