



## Product Datasheet

<b>Product Name</b>	Recombinant Human Histidyl-tRNA Synthetase
<b>Cata No</b>	CB500447
<b>Source</b>	<i>Escherichia Coli</i> .
<b>Synonyms</b>	Histidyl-tRNA synthetase, EC 6.1.1.21, Histidine-tRNA ligase, HisRS, HRS, FLJ20491, JO-1.

### Description

Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. The protein encoded by this gene is a cytoplasmic enzyme which belongs to the class II family of aminoacyl-tRNA synthetases. The enzyme is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. The gene is located in a head-to-head orientation with HARSL on chromosome five, where the homologous genes share a bidirectional promoter. The gene product is a frequent target of autoantibodies in the human autoimmune disease polymyositis/dermatomyositis. Histidyl-tRNA Synthetase Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain having a molecular mass of 55 kDa.

The Histidyl-tRNA Synthetase is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered clear solution.

### Purity

Greater than 90.0% as determined by both:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Protein quantitation was carried out by using 0.25 - 2.0 mg/ml Bradford assay vs. BSA.

### Formulation

The protein solution (1.2 mg/ml) contains 150mM NaCl and 10mM sodium phosphate containing 0.1% NaN<sub>3</sub> (pH 7.2).

### Stability

Lyophilized Histidyl-tRNA Synthetase although stable at 4°C for 3 weeks, should be stored desiccated below -18°C.

Please prevent freeze-thaw cycles.

### Application

Strongly reactive with human anti Histidyl-tRNA Synthetase antisera.

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