

**HARS, 1-509aa, Human, His tag, E.coli**

**Cat.NO.: TP02401**

3th Edition

**Synonyms:** Histidyl-tRNA synthetase, cytoplasmic, FLJ20491, HRS, HisRS, Histidine--tRNA ligase

**Description:** HARS, also known as Histidyl-tRNA synthetase, function to catalyze the aminoacylation of tRNAs by their corresponding amino acids. HARS is from the class II family of aminoacyl-tRNA synthetases. It is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. HARS is a frequent target of autoantibodies in the human autoimmune disease polymyositis/dermatomyositis.

**Form:** Liquid. In 20mM Tris-HCl buffer(pH 8.0) containing 10% glycerol 1mM DTT, 0.1M NaCl

**Molecular Weight:** 59.4 kDa (532aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHSSGLVPRGSHMGMSMAERAALLEELVKLQGERVRGLKQQKASAELIEEEVAKLLKLKAQLGPDESKQ  
KFVLKTPKGTRDYSPRQMAVREKVFVIRCFKRHGAEVIDTPVFELKETLMGKYGEDSKLIYDLKDQGGELLSLRY  
DLTVPFARYLAMNKLTNIKRYHIAKVYRRDNPAMTRGRYREFYQCDFDIAGNFDPMIPDAECLKIMCEILSSLQIGDF  
LVKVNDRRILDGMFAICGVSDSKFRATICSSVDKLDKVSWEVKNEMVGEKGLAPEVADRGDYVQQHGGVSLVEQL  
LQDPKLSQNQKQALEGLGDLKLLFEYLTLFGIDDKISFDLSLARGLDYYTGVVIYEAVLLQTQPAQAGEEPLGVGSVAAGG  
RYDGLVGMFDPKGRKVPVCVGLSIGVERIFSIVEQRLEAEEKIRTETQVLVASAQKKLLEERLKLVSELWDAGIKAE  
LLYKKNPKLLNQLQYCEEAGIPLVAIIGEQELKDGVIKLRSVTSREEVDVRREDLVEEIKRTGQPLCIC

**Purity:** > 95% by HPLC

**Concentration:** 1 mg/ml (determined by Absorbance at 280nm).

**Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.