

YARS, 1-528aa, Human, His tag, E.coli

Cat.NO.: TP04517

3th Edition

Synonyms: Tyrosyl-tRNA synthetase, CMTDIC, TYRRS, YRS, YTS

Description: Tyrosyl-tRNA synthetase, also known as YARS, belongs to the class I tRNA synthetase family. YARS is essential enzyme that catalyze the aminoacylation of tRNA^{Trp} with tryptophan, an essential function of the cell's protein synthesis machinery. Expression of YARS is highly stimulated in human cells by the addition of IFN-gamma. Recombinant human YARS protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

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

Molecular Weight: 61.3 kDa (548aa)

Sequences:

MGSSHHHHHSSGLVPRGSHMGDAPSPEEKHLHLITRNLQEVLGEEKLKEILKERELKIYWGTTATTGKPHVAYFVPM
SKIADFLKAGCEVTILFADLHAYLDNMKAPWELLELRVSYENVIKAMLESIGVPLEKLFKFIKGTDYQLSKEYTLDVYR
LSSVVTQHDSKKAGAEVVKQVEHPLLSGLLYPGLQALDEEYLKVDQAQFGGIDQRKIFTFAEKYLPALGYSKRVHLMN
PMVPGLTGSKMSSSEEEESKIDLLDRKEDVKKLKKAFCEPGNVENNGVLSFIKHVLFPLKSEFVILRDEKWGGNKTY
TAYVDLEKDFAAEVVHPGDLKNSVEVALNKLLDPIREKFNTPALKKLASAAYPDPSKQKPKMAKGPKNSEPEEVIPS
RLDIRVGKIITVEKHPDADSLYVEKIDVGEAEPRTVVSGLVQFVPKEELQDRLVVVLCNLKPQKMRGVESQGMLLCA
SIEGINRQVEPLDPPAGSAPGEHVFKGYEKQGPDEELPKKKVFEKLQADFKISEECIAQWKQTNFMTKLGSISSCK
SLKGGNIS

Purity: > 95% by HPLC

Concentration: 1 mg/ml (determined by Bradford assay)

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.