

Product information

YARS, 1-528 aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1055

Full name: Tyrosyl-tRNA synthetase

NCBI Accession No.: NP_003671

Synonyms: CMTDIC, TYRRS, YRS, YTS

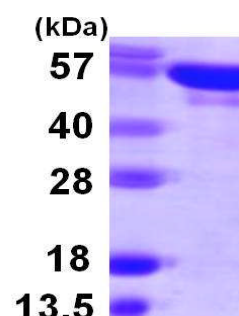
Description Tyrosyl-tRNA synthetase, also known as YARS, belongs to the class I tRNA synthetase family. YARS is essential enzyme that catalyze the aminoacylation of tRNA^{Trp} with tryptophan, an essential function of the cell's protein synthesis machinery. Expression of YARS is highly stimulated in 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)

Purity: > 90% by SDS - PAGE

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



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MGDAPSPEEK LHLITRNLE VLGEELKEI LKERELKIYW GTATTGKPHV AYFVPMSKIA DFLKAGCEVT
ILFADLHAYL DNMKAPWELL ELRVSYENV IKAMLESIGV PLEKLKFIKG TDYQLSKEYT LDVYRLSSVV TQHDSKKAGA EVVKQVEHPL
LSGLLYPGLQ ALDEEYLKVD AQFGGIDQRK IFTFAEKYLP ALGYSKRVHL MNPMVPLTG SKMSSEEEES KIDLLDRKED VKKKLKKAFC
EPGNVENNGV LSFIKHVLFP LKSEFVILRD EKWGKNKTYT AYVDLEKDF AEVVHPGDLK NSVEVALNKL LDPIREKFNT PALKKLASAA
YPDPSKQKPM AKGPAKNSEP EEVIPSRLDI RVGKIITVEK HPDADSLYE KIDVGAEPR TVVSGLVQFV PKEELQDRLV VVLCNLKPQK
MRGVESQGML LCASIEGINR QVEPLDPPAG SAPGEHVFVK GYEKGQPDDE LKPKKKVFEK LQADFKISEE CIAQWKQTNF MTKLGSISCK
SLKGGNIS

General references:

Kise Y., et al. (2004) *Nat Struct Mol Biol.* 11:149-156.

Wakasugi K., et al. (2002) *Proc Natl Acad Sci.* 99:173-177.

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.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.