

Recombinant Human YARS protein, His-tagged

Cat. No. YARS-991H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human YARS(1-528aa) fused with His tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	1-528 a.a.
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.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl
Molecular Mass	61.3 kDa (548aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSHILFADLHAYL DNMKAPWELL ELRVSYENV IKAMLESIGV PLEKLKFIKG TDYQLSKEYT LDVYRLSSVV TQHDSKKAGA EVLKQVEHPLL SGLLYPGLQ ALDEEYLKVD AQFGGIDQRK IFTFAEKYLP ALGYSKRVHL MNPMVPGLTG SKMSSEEEES KIDLLDRKED VKKKLKKAFCMGDAPSPEEK LHLITRNLQE VLGEEKLKEI LKERELKIYW

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GTATTGKPHV AYFVPMSKIA DFLKAGCEVTEPGNVENNGV LSFIKHVLFP
 LKSEFVILRD EKWGGNKTYT AYVDLEKDFA AEVVHPGDLK NSVEVALNKL
 LDPIREKFNT PALKKLASAAYPDPSKQKPM AKGPAKNSEP EEVIPSRLDI
 RVGKIITVEK HPDADSLYVE KIDVGAEPR TVVSGLVQFV PKEELQDRLV
 VVLCNLKPQKMRGVESQGML LCASIEGINR QVEPLDPPAG SAPGEHVFVK
 GYEKGQPDEE LKPKKKVFEK LQADFKISEE CIAQWKQTNF
 MTKLGSISCKSLKGGNIS

Purity >90% by SDS - PAGE

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

Concentration 1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name YARS tyrosyl-tRNA synthetase [Homo sapiens]

Official Symbol YARS

Synonyms YARS; tyrosyl-tRNA synthetase; tyrosine--tRNA ligase, cytoplasmic; tyrosine tRNA ligase 1; cytoplasmic; tyrRS; YRS; YTS; tyrosyl--tRNA ligase; tyrosine tRNA ligase 1, cytoplasmic; tyrosyl-tRNA synthetase, cytoplasmic; TYRRS; CMTDIC;

Gene ID 8565

mRNA Refseq NM_003680

Protein Refseq NP_003671

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MIM	603623
UniProt ID	P54577
Chromosome Location	1p35.1
Pathway	Aminoacyl-tRNA biosynthesis, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, conserved biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, conserved biosystem; Cytosolic tRNA aminoacylation, organism-specific biosystem; Gene Expression, organism-specific biosystem; tRNA Aminoacylation, organism-specific biosystem;
Function	ATP binding; interleukin-8 receptor binding; ligase activity; nucleotide binding; signal transducer activity; tRNA binding; tyrosine-tRNA ligase activity;

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