



# Recombinant Human Tyrosine--tRNA ligase, cytoplasmic (YARS)

<b>Product Code</b>	CSB-MP026245HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P54577
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	GDAPSPEEK LHLITRNLQE VLGEEKLKEI LKERELKIYW GTATTGKPHV AYFVPMSKIA DFLKAGCEVT ILFADLHAYL DNMKAPWELL ELRVSYEYENV IKAMLESIGV PLEKLFKFIG TDYQLSKEYT LDVYRLSSV TQHDSKKAGA EYVVKQVEHPL LSGLLYPGLQ ALDEEYLKVD AQFGGIDQRK IFTFAEKYLP ALGYSKRVLH MNPMVPGTGLG SKMSSSEES KIDLLDRKED VKKKLLKAFC EPGNVENNGV LSFIKHVLFP LKSEFVILRD EKWGGNKTYT AYVDLEKDFA AEVVHPGDLK NSVEVALNKL LDPIREKFNT PALKKLASAA YPDPKQKPM AKGPAKNSEP EEVIPSRLDI RVGKIITVEK HPDADSLYVE KIDVGAEPR TVVSGLVQFV PKEELQDRLV VVLCNLKPQK MRGVESQGML LCASIEGINR QVEPLDPPAG SAPGEHVFK GYEKGQPDEE LKPKKKVFEK LQADFKISEE CIAQWKQTNF MTKLGSISCK SLKGGNIS
<b>Source</b>	Mammalian cell
<b>Target Names</b>	YARS
<b>Protein Names</b>	Recommended name: Tyrosine--tRNA ligase, cytoplasmic EC=6.1.1.1 Alternative name(s): Tyrosyl-tRNA synthetase Short name= TyrRS
<b>Expression Region</b>	2-528
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Tyrosyl-tRNA synthetase belongs to the class I tRNA synthetase family. Cytokine activities have also been observed for the human tyrosyl-tRNA synthetase, after it is split into two parts, an N-terminal fragment that harbors the catalytic site and a C-terminal fragment found only in the mammalian enzyme. The N-terminal fragment is an interleukin-8-like cytokine, whereas the released C-terminal fragment is an EMAP II-like cytokine.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the



contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.