

## Product datasheet for RC204590L3

## OriGene Technologies, Inc.

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## Tyrosyl tRNA synthetase (YARS) (NM\_003680) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Tyrosyl tRNA synthetase (YARS) (NM\_003680) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

**Symbol:** Tyrosyl tRNA synthetase

**Synonyms:** CMTDIC; TYRRS; YARS; YTS

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC204590).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

ACCN: NM\_003680

ORF Size: 1584 bp



## Tyrosyl tRNA synthetase (YARS) (NM\_003680) Human Tagged Lenti ORF Clone - RC204590L3

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 003680.2</u>

 RefSeq Size:
 3117 bp

 RefSeq ORF:
 1587 bp

 Locus ID:
 8565

UniProt ID: P54577

Cytogenetics: 1p35.1

**Domains:** tRNA-synt 1b, tRNA bind

**Protein Families:** Druggable Genome

**Protein Pathways:** Aminoacyl-tRNA biosynthesis

**MW:** 59.1 kDa

**Gene Summary:** 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. [provided by

RefSeq, Jul 2008]