

Product datasheet for RC212911L4

OriGene Technologies, Inc.

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Isoleucyl tRNA synthetase (IARS) (NM_002161) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Isoleucyl tRNA synthetase (IARS) (NM_002161) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Isoleucyl tRNA synthetase

Synonyms: GRIDHH; IARS; ILERS; ILRS; IRS; PRO0785

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide The ORF insert of this c

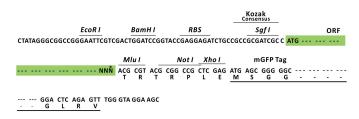
Sequence:

The ORF insert of this clone is exactly the same as(RC212911).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_002161

ORF Size: 3786 bp



Isoleucyl tRNA synthetase (IARS) (NM_002161) Human Tagged Lenti ORF Clone - RC212911L4

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 002161.2</u>, <u>NP 002152.1</u>

RefSeq Size:4335 bpRefSeq ORF:3789 bpLocus ID:3376

 UniProt ID:
 P41252

 Cytogenetics:
 9q22.31

Domains: tRNA-synt 1

Protein Families: Druggable Genome

Protein Pathways: Aminoacyl-tRNA biosynthesis, Valine, leucine and isoleucine biosynthesis

MW: 144.3 kDa

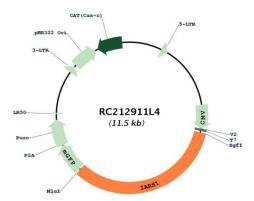
Gene Summary: Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino

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. Isoleucine-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family and has been identified as a target of autoantibodies in the autoimmune disease polymyositis/dermatomyositis. Alternatively spliced transcript variants have been found.

[provided by RefSeq, Nov 2012]



Product images:



Circular map for RC212911L4