

Product datasheet for RC201077L3

IVD (NM_002225) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: IVD (NM_002225) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: IVD

Synonyms: ACAD2; IVDH

Mammalian Cell

Selection:

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

Puromycin

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

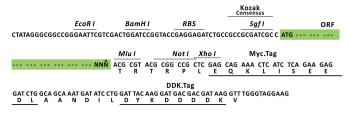
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC201077).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_002225

ORF Size: 1269 bp



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OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 002225.2</u>

 RefSeq Size:
 4673 bp

 RefSeq ORF:
 1272 bp

 Locus ID:
 3712

 UniProt ID:
 P26440

Cytogenetics: 15q15.1

Domains: Acyl-CoA_dh, Acyl-CoA_dh_M, Acyl-CoA_dh_N

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Valine, leucine and isoleucine degradation

MW: 46.2 kDa

Gene Summary: Isovaleryl-CoA dehydrogenase (IVD) is a mitochondrial matrix enzyme that catalyzes the third

step in leucine catabolism. The genetic deficiency of IVD results in an accumulation of isovaleric acid, which is toxic to the central nervous system and leads to isovaleric acidemia. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq,

Aug 2017]