

## **Product datasheet for RC229217L2**

## 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: mGFP Symbol: IVD

Synonyms: ACAD2; IVDH

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC229217).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_002225

ORF Size: 1278 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <u>More info</u>

**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:** NM 002225.3, NP 002216.2

 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: 46.5 kDa

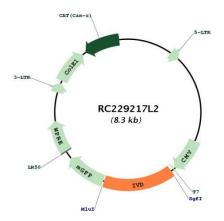
**Gene Summary:** Isovaleryl-CoA dehydrogenase (IVD) is a mitochondrial matrix enzyme that catalyzes the third

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,

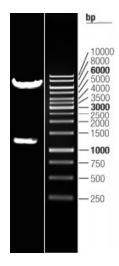
Aug 2017]



## **Product images:**



Circular map for RC229217L2



Double digestion of RC229217L2 using Sgfl and Mlul  $\,$