

Product datasheet for RC200313L4

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OriGene Technologies, Inc.

IDH3A (NM_005530) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: IDH3A (NM_005530) Human Tagged Lenti ORF Clone

Tag: mGFP
Symbol: IDH3A
Synonyms: RP90

Mammalian Cell Puromycin

Selection:

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

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

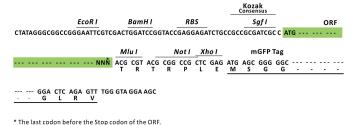
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200313).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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ACCN: NM_005530

ORF Size: 1098 bp





IDH3A (NM_005530) Human Tagged Lenti ORF Clone - RC200313L4

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 005530.2</u>

 RefSeq Size:
 2701 bp

 RefSeq ORF:
 1101 bp

 Locus ID:
 3419

 UniProt ID:
 P50213

Cytogenetics: 15q25.1

Domains: isodh

Protein Pathways: Citrate cycle (TCA cycle), Metabolic pathways

MW: 39.6 kDa

Gene Summary: Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-

oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been

reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the

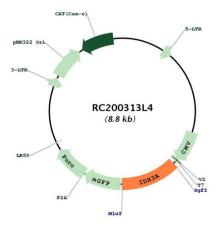
mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which

is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate

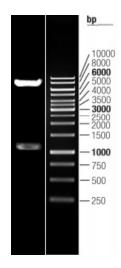
dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. The protein encoded by this gene is the alpha subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC200313L4



Double digestion of RC200313L4 using Sgfl and Mlul