

#### **Product datasheet for RC201692L3**

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**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

### IDH3G (NM\_004135) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: IDH3G (NM\_004135) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: IDH3G

**Synonyms:** H-IDHG

Mammalian Cell Puromycin

Selection:

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

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

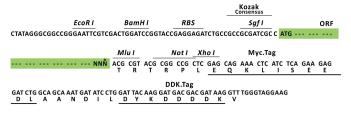
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC201692).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

**ACCN:** NM\_004135

ORF Size: 1179 bp



#### IDH3G (NM\_004135) Human Tagged Lenti ORF Clone - RC201692L3

**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 004135.2</u>

RefSeq Size: 1502 bp
RefSeq ORF: 1182 bp
Locus ID: 3421

UniProt ID: P51553

Cytogenetics: Xq28

**Domains:** isodh

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

MW: 42.8 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

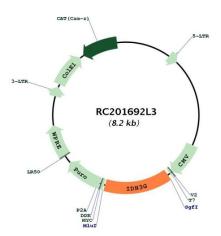
is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate

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 gamma subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. This gene is a candidate gene for periventricular heterotopia. Several alternatively spliced transcript variants of this gene have been described, but only some of their full length natures have been determined.

[provided by RefSeq, Jul 2008]



## **Product images:**



Circular map for RC201692L3