

## Product datasheet for RC206754L3V

## OriGene Technologies, Inc.

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## **DUOXA1 (NM 144565) Human Tagged ORF Clone Lentiviral Particle**

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** DUOXA1 (NM\_144565) Human Tagged ORF Clone Lentiviral Particle

Symbol:

mol; NIP; NUMBIP Synonyms:

**Mammalian Cell** 

Selection:

ACCN:

Puromycin

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

NM 144565

Tag: Myc-DDK

**ORF Size:** 1449 bp

**ORF Nucleotide** 

Cytogenetics:

The ORF insert of this clone is exactly the same as(RC206754). Sequence:

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.

RefSeq: NM 144565.2

RefSeq Size: 2020 bp RefSeq ORF: 1452 bp Locus ID: 90527 **UniProt ID:** Q1HG43

**Protein Families:** Transmembrane

15q21.1

MW: 53.5 kDa







## **Gene Summary:**

Dual oxidases DUOX1 and DUOX2 are NADPH oxidases which are involved in hydrogen peroxide production necessary for thyroid hormonogenesis. They form a heterodimer with specific maturation factors DUOXA1 and DUOXA2, respectively, which is essential for the maturation and function of the DUOX enzyme complexes. This gene encodes the DUOX1 activator or maturation factor DUOXA1. Rat studies identified a bidirectional promoter which controls the transcription of the DUOX1 and DUOXA1 genes. This protein is cotransported to the cell surface when coexpressed with DUOX1 and is retained in the endoplasmic reticulum when expressed without DUOX1 protein. The expression of this gene or the DUOX1 gene is not suppressed by thyroglobulin (Tg), a macromolecular precursor in thyroid hormone synthesis, while the expression of the DUOX2 and DUOXA2 are significantly suppressed by the Tg. This protein is also a p53-regulated neurogenic factor involved in p53 dependent neuronal differentiation. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2013]