

Product datasheet for RC219169L3

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OriGene Technologies, Inc.

CHIT1 (NM_003465) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CHIT1 (NM 003465) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: CHIT1

Synonyms: CHI3; CHIT; CHITD

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(RC219169).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_003465

ORF Size: 1398 bp



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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: NM 003465.1

RefSeq Size: 1633 bp
RefSeq ORF: 1401 bp
Locus ID: 1118
UniProt ID: <u>Q13231</u>

Cytogenetics: 1q32.1

Domains: Glyco 18, CBM 14

Protein Families: Secreted Protein, Transmembrane

Protein Pathways: Amino sugar and nucleotide sugar metabolism

MW: 51.5 kDa

Gene Summary: Chitotriosidase is secreted by activated human macrophages and is markedly elevated in

plasma of Gaucher disease patients. The expression of chitotriosidase occurs only at a late

stage of differentiation of monocytes to activated macrophages in culture. Human

macrophages can synthesize a functional chitotriosidase, a highly conserved enzyme with a strongly regulated expression. This enzyme may play a role in the degradation of chitin-containing pathogens. Several alternatively spliced transcript variants have been described

for this gene. [provided by RefSeq, Jan 2012]