

Product datasheet for **RC232740**

CHIT1 (NM_001256125) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CHIT1 (NM_001256125) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CHIT1
Synonyms:	CHI3; CHIT; CHITD
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC232740 representing NM_001256125
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTGGGCTGTGGCCTGGCAGTTCATGGTCTGTGATGATCCCATGGGCTCTGTGCAAAAC
 TGGTCTGCTACTTCACCAACTGGGCCAGTACAGACAGGGGAGGCTCGCTTCTGCCCAAGGACTTGA
 CCCCAGCCTTTGCACCCACCTCATCTACGCCTCGCTGGCATGACCAACCACCAGCTGAGCACCCTGAG
 TGGAAATGACGAGACTCTCTACCAGGAGTTCAATGGCCTGAAGAAGATGTTACAGATATGGTAGCCACGG
 CCAACAACCGTCAGACCTTTGTCAACTCGGCCATCAGGTTTCTGCGCAAAACAGCTTTGACGGCCTTGA
 CCTTGACTGGGAGTACCCAGGAAGCCAGGGGAGCCCTGCCGTAGACAAGGAGCGCTTCAACCCCTGGTA
 CAGGACTTGGCCAATGCCTTCCAGCAGGAAGCCAGACCTCAGGGAAGGAACGCCTTCTTCTGAGTGCAG
 CGGTTCCAGCTGGCAGACCTATGTGGATGCTGGATACGAGGTGGACAAAATCGCCAGAACCTGGATTT
 TGTCAACCTTATGGCCTACGACTTCCATGGCTCTTGGGAGAAGGTCACGGGACATAACAGCCCCCTTAC
 AAGAGGCAAGAAGAGAGTGGTGCAGCAGCCAGCCTCAACGTGGATGCTGCTGTGCAACAGTGGCTGCAGA
 AGGGGACCCCTGCCAGCAAGCTGATCCTTGGCATGCCTACCTACGGACGCTCCTTCACTGGCCTCCTC
 ATCAGACACCAGAGTGGGGGCCAGCCACAGGCTCTGGCACTCCAGGCCCTTCAACAAGGAAGGAGGG
 ATGCTGGCCTACTATGAAGTCTGCTCCTGGAAGGGGCCACCAACAGAGAATCCAGGATCAGAAGGTGC
 CCTACATCTTCCGGGACAACCAAGTGGGTGGGCTTTGATGATGTGGAGAGCTTCAAACCAAGGTGAGTA
 TCTGAAGCAGAAGGACTGGGCGGGCCATGGTCTGGCACTGGACTTAGATGACTTTGCCGGCTTCTCC
 TGCAACCAGGGCCGATACCCCTCATCCAGACGCTACGGCAGGAAGTGAAGTCTTCCATACCTTGCCTCAG
 GCACCCAGAGCTTGAAGTTCCAAAACCAAGTCAAGCCTTGAACCTGAGCATGGCCAGCCCTGGCAG
 AGACACGTTCTGCCAGGGCAAAGCTGATGGGCTCTATCCCAATCCTCGGGAACGGTCCAGCTTCTACAGC
 TGTGCAGCGGGCGGCTGTTCCAGCAAAGCTGCCCGACAGGCCTGGTGTTCAGCAACTCCTGCAAATGCT
 GCACCTGGAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC232740 representing NM_001256125
 Red=Cloning site Green=Tags(s)

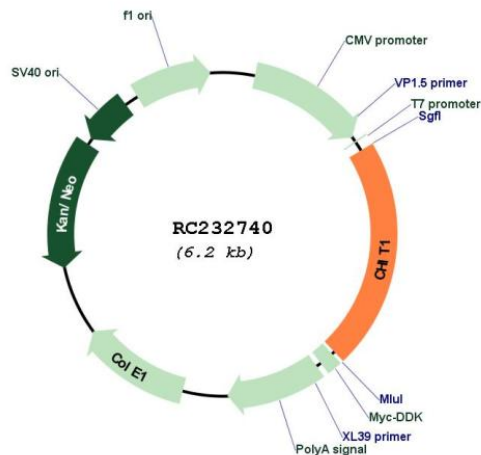
MVRSVAWAGFMVLLMIPWGSAAKLVCYFTNWAQYRQGEARFLPKDLDPSTLCTHLIYAFAGMTNHQLSTTE
 WNDETLYQEFNGLKMFDMVATANNRQTFVNSAIRFLRKYSFDGLDLWEYPGSQGSPAVIDKERFTTLV
 QDLANAFQQAQTSKERLLLAAVPAQTYVDAGYEVDKIAQNLDVNLMAFDHGSWEKVTGHNSPLY
 KRQEESGAAAASLVDAVQQLKQKTPASKLILGMPTYGRSFTLASSDTRVGAPATGSGTPGPFTKEGG
 MLAYYEVCSWKATKQRIQDQKVPYIFRDNQWVGFDDVESFKTKVSYLKQKGLGGAMVWALDLDDFAGFS
 CNQGRYPLIQTLRQELSLPYLPSGTPELEVPKPGQPSEPEHGSPGQDTFCQKADGLYPNPRERSFYF
 CAAGRLLFQQSCPTGLVFSNSCKCCTWN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001256125

ORF Size: 1341 bp

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:	<ol style="list-style-type: none">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_001256125.2
RefSeq Size:	2268 bp
RefSeq ORF:	1344 bp
Locus ID:	1118
UniProt ID:	Q13231
Cytogenetics:	1q32.1
Protein Families:	Secreted Protein, Transmembrane
Protein Pathways:	Amino sugar and nucleotide sugar metabolism
MW:	50.1 kDa
Gene Summary:	<p>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]</p>