

## Product datasheet for RC210705L1V

## OriGene Technologies, Inc.

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# ZP3 (NM\_007155) Human Tagged ORF Clone Lentiviral Particle

### **Product data:**

Product Type: Lentiviral Particles

**Product Name:** ZP3 (NM\_007155) Human Tagged ORF Clone Lentiviral Particle

Symbol: ZP3

Synonyms: OOMD3; Zp-3; ZP3A; ZP3B; ZPC

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-Myc-DDK (PS100064)

 Tag:
 Myc-DDK

 ACCN:
 NM\_007155

 ORF Size:
 1119 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(RC210705).

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: <u>NM 007155.4</u>

 RefSeq Size:
 1467 bp

 RefSeq ORF:
 1122 bp

 Locus ID:
 7784

 UniProt ID:
 P21754

 Cytogenetics:
 7q11.23

**Protein Families:** Secreted Protein, Transmembrane

MW: 41.1 kDa







#### **Gene Summary:**

The zona pellucida is an extracellular matrix that surrounds the oocyte and early embryo. It is composed primarily of three or four glycoproteins with various functions during fertilization and preimplantation development. The protein encoded by this gene is a structural component of the zona pellucida and functions in primary binding and induction of the sperm acrosome reaction. The nascent protein contains a N-terminal signal peptide sequence, a conserved ZP domain, a C-terminal consensus furin cleavage site, and a transmembrane domain. It is hypothesized that furin cleavage results in release of the mature protein from the plasma membrane for subsequent incorporation into the zona pellucida matrix. However, the requirement for furin cleavage in this process remains controversial based on mouse studies. A variation in the last exon of this gene has previously served as the basis for an additional ZP3 locus; however, sequence and literature review reveals that there is only one full-length ZP3 locus in the human genome. Another locus encoding a bipartite transcript designated POMZP3 contains a duplication of the last four exons of ZP3, including the above described variation, and maps closely to this gene. [provided by RefSeq, Jul 2008]