

Product datasheet for RC210177L3

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ZP4 (NM_021186) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ZP4 (NM_021186) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: ZP4

Synonyms: ZBP; Zp-4; ZP1; ZPB

Mammalian Cell Puromycin

Selection:

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

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

The ORF insert of this clone is exactly the same as(RC210177). **ORF Nucleotide**

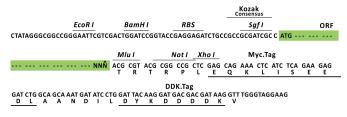
Sgfl-Mlul

Sequence:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_021186

ORF Size: 1620 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: <u>NM 021186.3</u>

 RefSeq Size:
 2474 bp

 RefSeq ORF:
 1623 bp

 Locus ID:
 57829

 UniProt ID:
 Q12836

 Cytogenetics:
 1q43

Protein Families: Secreted Protein, Transmembrane

MW: 59.4 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 nascent protein contains a N-terminal signal peptide sequence, a conserved ZP domain, a consensus furin cleavage site, and a C-terminal

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. Previously, this gene has been referred to as ZP1 or ZPB and thought to have similar functions as mouse Zp1. However, a human gene with higher similarity and chromosomal synteny to mouse Zp1 has been assigned the symbol ZP1

and this gene has been assigned the symbol ZP4. [provided by RefSeq, Jul 2008]