

Product datasheet for **RC239448**

ZP2 (NM_001290104) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZP2 (NM_001290104) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZP2
Synonyms:	OOMD6; Zp-2; ZPA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC239448 representing NM_001290104
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGTGCAGGCAGAGAGGAGGCTCTTGAGTCCCTCAGGCTGGTTCAATGCAGGCTGGAGCACCTACA
 GGTGATTTCTCTCTTCTCGCCCTTGACTTCAGGAACTCCATAGATGTTTCTCAGTTGGTAAATCC
 TGCCCTTCCAGGCACTGTCACTTGCAGTAAAGGGAAATAACAGTGGAGTCCCAAGCAGTCTGGCACC
 AAGAAATGGCATGCATCTGTGGTGGATCCTCTGGTCTCGACATGCCAACTGCCTTACATCTGGACC
 CAGAAAAGCTCACCTGAGGGCTACCTATGATAACTGTACCAGGAGAGTGCATGGTGGACACCAGATGAC
 CATCAGAGTCATGAACAACAGTGTGCCTTAAGACACGGAGCTGTATGTATCAGTTCTTCTGTCCAGCT
 ATGCAAGTAGAAGAGACCCAGGGCTTTCAGCATCTACAATCTGCCAGAAGGATTCATGTCTTTTTCT
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 GGTGGTGGTGGTGAAGAGCCAAAACCTGACCTGCCAGAGGCCATGAAGGAAGGCTTCAGCCTCTTG
 ATTGACAACCACAGGATGACCTTCCATGTGCCATTCAATGCCACTGGAGTGACTCACTATGTGCAAGGTA
 ACAGTCATCTCTACATGGTGTCTCTGAAGCTTACATTTATATCTCTGGACAGAAGGTGATCTTCTCTTC
 ACAAGCTATTTGTGCACCAGATCCTGTGACCTGCAATGCCACACACATGACTCTCACCATACCAGAGTTT
 CCTGGGAAGCTTAAAGTCTGTGAGCTTTGAAAACCAAGAATTGATGTGAGCCAGCTGCATGACAATGGAA
 TTGATCTAGAAGCAACAATGGCATGAAATTCATTTGAGCAAACTCTGCTCAAACGAAATATCTGA
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 TCCATGGTGCATCTATCCTGAGTGTCTCTGTGAGTACCCGTTTCTATAGTTACAGGGGAGCTGTGCACCC
 AGGATGGGTTTATGGACGTCGAGGCTACAGCTACCAACACAAACCAGCTCTTGACCTGGTACTCTGAG
 GGTGGGAAACTCATCCTGCCAGCCTGTCTTTGAGGCTCAGTCTCAGGGGCTGGTACGGTTCCACATACCC
 CTGAATGGATGTGGAACGAGATATAAGTTCGAAGATGATAAAGTCGTCTATGAAAACGAAATACATGCTC
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 CAACGTTGAAAGCCTTACTCCTCCAGTGGCCTCAGTGAAGTTGGGTCCATTTACCTTGATCCTGCAAAGC
 TACCCAGATAATCCTACCAACAACCTTATGGGAAAACGAGTACCCTCTAGTGAGATTCCTCCGCCAAC
 CAATTTACATGGAAGTGAGAGTCTAAACAGGGATGACCCCAACATCAAGCTGGTCTTAGATGACTGCTG
 GCGCAGTCCACCATGGATCCAGACTCTTCCCCAGTGAACGTTGTCGTGGATGGCTGTGCATATGAC
 CTGGACAACCTACCAGACCCTTCCATCCAGTCCGCTCCTCTGTGACCCATCCTGATCCTATCAGAGGT
 TTGACATGAAGGCTTTTGCTTTGTATCAGAAGCCACGTCCTCTAGCCTGGTCTACTCCACTCGAG
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 GGAGATGTTGGTTCAAAGCTGTGGCTGTGGCTGCCTTTGCAGGTGTGGTGGCAACTCTAGGCTTCA
 TCTACTACCTGTACGAGAAAAGGACTGTGTCAAATCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239448 representing NM_001290104
 Red=Cloning site Green=Tags(s)

MACRQRGGSWSPSGWFNAGWSTYRSISLFFALVTSGNSIDVSQLVNPAPPGTVCDEREITVEFPSSPGT
 KKWHASVVDPLGLDMPNCTYILDPEKLTLRATYDNCTRRVHGGHMTIRVMNNSAALRHGAVMYQFFCPA
 MQVEETQGLSASTICQKDFMSFSLPRVFSGLADDSKGTQVMGWSIEVGDGARAKTLTLPEAMKEGFSLL
 IDNHRMTFHVFPNATGVTHYVQGNSHLYMVSCLKTFISPGQKVFSSQAICAPDPVTCNATHMTLTIPEF
 PGKLSVSVFENQIDVSQLHDNGIDLEATNGMKLHFSTLLKTKLSEKLLHQFYLASLKLTFLLRPETV
 SMVIYPECLCESPVSIVTGELCTQDGFMDVEVYSYQTQPALDLGTLRVGNSSCQPVFEAQSQLVRFHIP
 LNGCGTRYKFEDDKVYVENEIHALWTFPPSKISRSEFRNDMLLNINVESLTPPVASVCLKGPFTLILQS
 YPDNSYQPYGENEYPLVRFRLRQPIYMEVRVLNRDDPNIKLVLDCCWATSTMDPDSFPQWNVVVDGCAYD
 LDNYQTTFHPVGSSTVHPDHYQRFDMKAFVSEAHVLSLVYFHCSALICNRLSPDSPLCSVTCPVSSR
 HRRATGATEAEKMTVSLPGPILLLSDDSSFRGVGSSDLKASGSSGEKSRSETGEEVGSRGAMDTKGHKTA
 GDVGSKAVAAVAAGVVATLGFIIYYLYEKRTVSNH

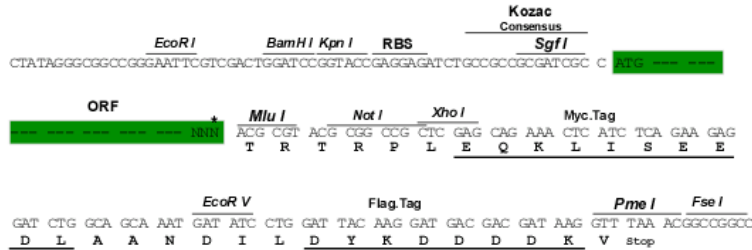
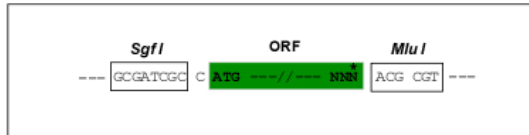
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

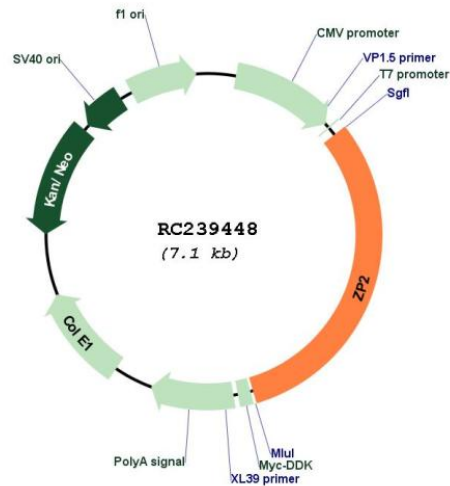
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001290104

ORF Size: 2208 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:

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_001290104.1](#), [NP_001277033.1](#)

RefSeq Size: 2722 bp

RefSeq ORF: 2211 bp

Locus ID: 7783

UniProt ID: [Q05996](#)

Cytogenetics: 16p12.3-p12.2

Protein Families: Secreted Protein, Transmembrane

MW: 81.8 kDa

Gene Summary: The zona pellucida is an extracellular matrix that surrounds the oocyte and early embryo. It is composed of three glycoproteins with various functions during fertilization and preimplantation development. The glycosylated mature peptide is one of the structural components of the zona pellucida and functions in secondary binding and penetration of acrosome-reacted spermatozoa. Female mice lacking this gene do not form a stable zona matrix and are sterile. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]