

Product datasheet for **RC219115**

ZP2 (NM_003460) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | ZP2 (NM_003460) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | ZP2 |
| Synonyms: | OOMD6; Zp-2; ZPA |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide
Sequence:

>RC219115 representing NM_003460
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTGCAGGCAGAGAGGAGGCTCTTGAGTCCCTCAGGCTGGTTCAATGCAGGCTGGAGCACCTACA
GGTCGATTTCTCTTCTTCGCCCTTGACTTCAAGTGAAGTCCATAGATGTTTCTCAGTTGGTAAATCC
TGCCCTTCCAGGCACTGTCACTTGCAGTAAAGGGAAATAACAGTGGAGTCCCAAGCAGTCTGGCACC
AAGAAATGGCATGCATCTGTGGTGGATCCTCTGGTCTCGACATGCCAACTGCATTACATCCTGGACC
CAGAAAAGCTCACCTGAGGGCTACCTATGATAACTGTACCAGGAGAGTGCATGGTGGACACCAGATGAC
CATCAGAGTCATGAACAACAGTGTGCCTTAAGACACGGAGCTGTATGTATCAGTTCTTCTGTCCAGCT
ATGCAAGTAGAAGAGACCCAGGGCTTTCAGCATCTACAATCTGCCAGAAGGATTCATGTCTTTTTCT
TGCCACGGGTCTTCTCTGGCTGGCTGATGACAGTAAGGGGACCAAAGTTCAGATGGGATGGAGCATTGA
GGTTGGTGTGGTGAAGAGCCAAAACCTGACCTGCCAGAGGCCATGAAGGAAGGCTTCAGCCTCTTG
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ACAGTCATCTCTACATGGTGTCTCTGAAGCTTACATTTATATCTCCTGGACAGAAGGTGATCTTCTCTTC
ACAAGCTATTTGTGCACCAGATCCTGTGACCTGCAATGCCACACACATGACTCTCACCATACCAGAGTTT
CCTGGGAAGCTTAAAGTCTGTGAGCTTTGAAAACCAAGAACATTGATGTGAGCCAGCTGCATGCAATGGAA
TTGATCTAGAAGCAACAATGGCATGAAATTCATTTGCAAAAACCTGCTCAAACGAAATATCTGA
AAAATGCCTACTCCATCAGTTCTACTTAGCTTCACTCAAGCTGACCTTTCTCCTTCGGCCAGAGACAGTA
TCCATGGTGTATCTCCTGAGTGTCTCTGTGAGTACCCGTTTCTATAGTTACAGGGGAGCTGTGCACCC
AGGATGGGTTTATGGACGTCGAGGCTACAGCTACCAACACACAGCTCTTGACCTGGTACTCTGAG
GGTGGGAAACTCATCCTGCCAGCCTGTCTTTGAGGCTCAGTCTCAGGGGCTGGTACGGTTCCACATACCC
CTGAATGGATGTGGAACGAGATATAAGTTCGAAGATGATAAAGTCGTCTATGAAAACGAAATACATGCTC
TCTGGACGGATTTTCTCCAAGCAAAATATCTAGAGACAGTGAAGTTCAGAATGACAGTGAAGTGTCTTA
TAGCAGGAATGACATGCTACTAAACATCAACGTTGAAAGCCTTACTCCTCCAGTGGCCTCAGTGAAGTTG
GGTCCATTTACCTTGATCCTGCAAAGCTACCCAGATAATTCTACCAACAACCTTATGGGAAAACGAGT
ACCCTCTAGTGAAGTTCCTCCGCAACCAATTTACATGGAAGTGAAGTCCCTAACAGGGATGACCCCAA
CATCAAGCTGGTCTTAGATGACTGCTGGGCGACGTCACCATGGATCCAGACTCTTCCCCAGTGGAAC
GTTGTCGTGGATGGCTGTGCATATGACCTGGACAACCTACCAGACCACCTCCATCCAGTCCGCTCCTCTG
TGACCCATCCTGATCACTATCAGAGTTTGACATGAAGGCTTTTGCCTTTGTATCAGAAGCCACGCTGCT
CTCTAGCCTGGTCTACTTCCACTGCAGTGCCTAATCTGTAATCGACTCTCCCCTGACTCCCCTGCTGT
TCTGTGACCTGCCCTGTCTCTCTAGGCACAGGCGAGCCACAGGGGCCACTGAAGCAGAGAAAATGACAG
TCAGCCTCCCAGGACCCATTCTCCTGTTGTGAGTACTCCTCATTGAGAGGTGTCGGCTCATCTGATCT
AAAAGCAAGTGGGAGCAGTGGGAGAAGAGTAGGAGTGAACAGGGGAGGAGGTTGGCTCACGAGGTGCT
ATGGACACCAAGGGCACAAGACTGCTGGAGATGTTGGTTCCAAAGCTGTGGCTGCTGTGGCTGCCTTTG
CAGGTGTGGTGGCAACTTAGGCTTCATCTACTACCTGTACGAGAAAAGGACTGTGTCAAATCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC219115 representing NM_003460
 Red=Cloning site Green=Tags(s)

MACRQRGGSWSPSGWFNAGWSTYRSISLFFALVTSVNSIDVSQLVNPAPPGTVCDEREITVEFPSSPGT
 KKWHASVVDPLGLDMPNCTYILDPEKLTLRATYDNCTRRVHGGHQMTRVMNNSAALRHGAVMYQFFCPA
 MQVEETQGLSASTICQKDFMSFSLPRVFSGLADDSKGTQVQMGWSIEVGDGARAKTLTLPEAMKEGFSLL
 IDNHRMTFHVPFNATGVTHYVQGNLHLYMVSLLKTFISPGQKVFSSQAICAPDPVTCNATHMTLTIPEF
 PGKLKSVSFENQIDVSQLHDNGIDLEATNGMKLHFSTLLKTKLSEKCLLHQFYLASLKLTLFLLRPETV
 SMVIYPECLCESPVSIVTGELCTQDGFMDVEVYSYQTPALDLGTLRVGNSSCQPVFEAQSQGLVRFHIP
 LNGCGTRYKFEDDKVYVENEIHALWTFPPSKISRSEFRMTVKCSYSRNDMLLNINVESTPPVASVKL
 GPFTLILQSPDINSYQQPYGENEYPLVRFRLRQPIYMEVRLNRDDPNIKLVLDCCWATSTMDPDSFPQWN
 VVDGCAVDLDNYQTTFFHPVGSVTHPDHYQRFDMKAFVSEAHVLSLVEYFHCALICNRLSPDSPLC
 SVTCPVSSRHRRTGATEAEKMTVSLPGPILLSDSSFRGVGSSDLKASGSSGKSRSETGEEVGSRGA
 MDTKGHKTAGDVGSKAVAAVAAGVAVTLGFIYYLYEKRTVSNH

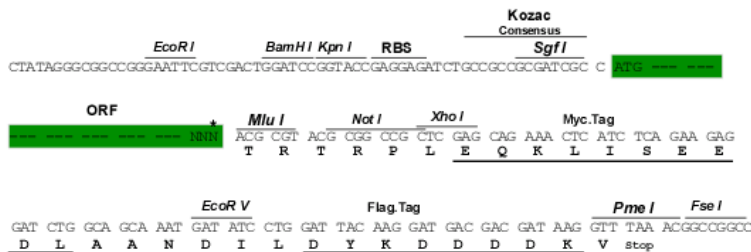
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6105_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_003460

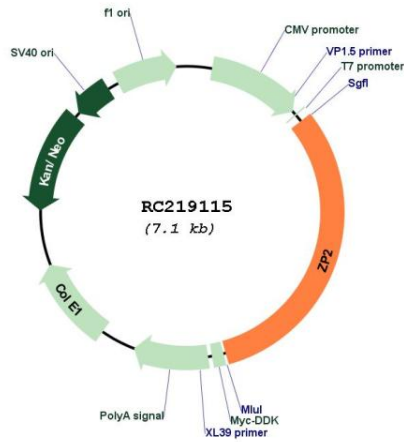
ORF Size: 2235 bp

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](#)

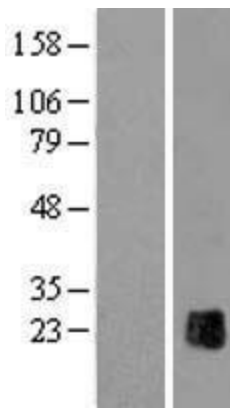
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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|-------------------------------|---|
| 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: | <u>NM_003460.2</u> |
| RefSeq Size: | 2266 bp |
| RefSeq ORF: | 2238 bp |
| Locus ID: | 7783 |
| UniProt ID: | <u>Q05996</u> |
| Cytogenetics: | 16p12.3-p12.2 |
| Domains: | zona_pellucida |
| Protein Families: | Secreted Protein, Transmembrane |
| MW: | 82.4 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] |

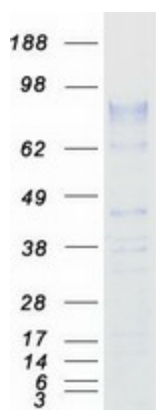
Product images:



Circular map for RC219115



Western blot validation of overexpression lysate (Cat# [LY418662]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219115 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ZP2 protein (Cat# [TP319115]). The protein was produced from HEK293T cells transfected with ZP2 cDNA clone (Cat# RC219115) using MegaTran 2.0 (Cat# [TT210002]).