

Product datasheet for RC210705

ZP3 (NM_007155) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZP3 (NM_007155) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ZP3
Synonyms:	OOMD3; Zp-3; ZP3A; ZP3B; ZPC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210705 representing NM_007155 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTCATGGTCAGCAAAGACCTTTTTGGCACCGGAAGCTCATCAGGGCTGCTGACCTCACCTTGGGCC
CAGAGGCTGTGAGCCTCTGGTCTCCATGGACACAGAAGATGTGGTCAGGTTTGGAGTTGGACTCCACGA
GTGTGGCAACAGCATGCAGGTAAGTACGATGCCCTGGTGTACAGCACCTTCTGCTCCATGACCCCGC
CCCGTGGAAACCTGTCCATCGTGAGGACTAACCGCGCAGAGATCCCATCGAGTGCCGCTACCCAGGC
AGGGCAATGTGAGCAGCCAGGCCATCTGCCACCTGGTTGCCCTCAGGACCACGGTGTCTCAGAGGA
GAAGCTGACTTTCTCTGCGTCTGATGGAGGAGAAGTGAACGCTGAGAAGAGGTCCCCACCTTCCAC
CTGGGAGATGCAGCCACCTCCAGGCAGAAATCCACACTGGCAGCCACGTGCCACTGCGGTTGTTTGTGG
ACCACTGCGTGGCCACACCGACACCAGACCAGAAATGCCTCCCCTTATCACACCATCGTGGACTTCCATGG
CTGTCTTGTGCGGCTCACTGATGCCTTCTGCATTCAAAGTTCTCGACCCGGGCCAGATACACTC
CAGTTCACAGTGGATGTCTTCACTTTGCTAATGACTCCAGAAACATGATATACATCACCTGCCACCTGA
AGGTCACCCTAGCTGAGCAGGACCCAGATGAACTCAACAAGGCCTGTTCCCTCAGCAAGCCTTCCAACAG
CTGGTTCCAGTGAAGGCTCGGCTGACATCTGCAATGCTGTAACAAAGGTGACTGTGGCACTCCAAGC
CATTCCAGGAGGCAGCCTCATGTATGAGCCAGTGGTCCAGGCTGCTTCCCGTAACCGCAGGCATGTGA
CAGAAGAAGCAGATGTACCGTGGGCCACTGATCTTCCGACAGGAGGGTGACCATGAAGTAGAGCA
GTGGGCTTTGCCCTCTGACACCTCAGTGGTGTGCTGGGCGTAGGCCCTGGCTGTGGTGGTGTCCCTGACT
CTGACTGCTGTTATCCTGGTTCTCACCAGGAGGTGTCGCACTGCCTCCCACCCTGTGCTGCTTCCGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC210705 representing NM_007155
Red=Cloning site Green=Tags(s)

MVMVSKDLFGTGKLIIRAADLTGPEACEPLVSMDETDDVVRFEVGLHECGNSMQVTDDALVYSTFLLHDP
 PVGNLSIVRTNRAEPIECRYPRQGNVSSQAILPTWLPFRRTTVFSEEKLFSLRLMEENWNAEKRSPTFH
 LGDAAHLQAEIHTGSHVPLRLFVDHCVAATPTDQNASPYHTIVDFHGCLVDGLTDASSAFKVPVPRGPDTL
 QFTVDVDFHFANDSRNMIYITCHLKVTLAEQDPDELNKACSF SKPSNSWFPVEGSADICCCCNKGDGTPS
 HSRRQPHVMSQWSRSASRNRHVTEEADVTVGPLIFLDRRGDHEVEQWALPSDTSVVLLGVGLAVVSLT
 LTAVILVLTRRCRTASHPVSASE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3421_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007155

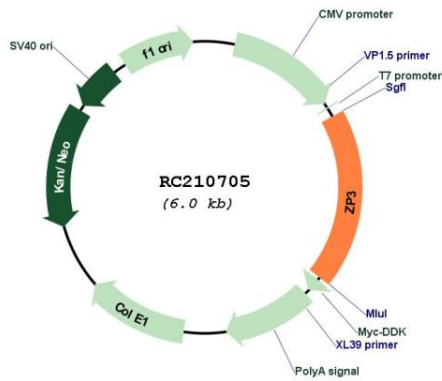
ORF Size: 1119 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

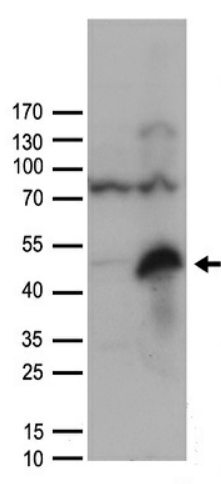
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_007155.6
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:	<p>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]</p>

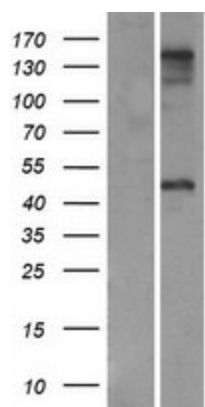
Product images:



Circular map for RC210705



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ZP3 (Cat# RC210705, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ZP3 antibody (Cat# [TA890039]). Positive lysates [LY429335] (100ug) and [LC429335] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416160]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210705 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).