

Product datasheet for **RG225686**

ZP3 (NM_001110354) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZP3 (NM_001110354) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZP3
Synonyms:	OOMD3; Zp-3; ZP3A; ZP3B; ZPC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG225686 representing NM_001110354 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCTGAGCTATAGGCTCTTCATCTGCCTCCTGCTCTGGGTAGTACTGAGCTGTGCTACCCCAAC
CCCTCTGGCTCTTGCAGGGTGGAGCCAGCCATCCTGAGACGTCCGTACAGCCCGTACTGGTGGAGTGTCA
GGAGGCCACTCTGATGGTCATGGTCAGCAAAGACCTTTTTGGCACCAGGAAAGCTCATCAGGGCTGCTGAC
CTCACCTTGGGCCAGAGGCCTGTGAGCCTCTGGTCTCCATGGACACAGAAGATGTGGTCAGGTTTGAGG
TTGGACTCCACGAGTGTGGCAACAGCATGCAGGTAAGTACGATGCCCTGGTGTACAGCACCTTCCTGCT
CCATGACCCCGCCCGTGGGAAACCTGTCCATCGTGAGGACTAACCAGCAGAGATTCCCATCGAGTGC
CGCTACCCAGGCAGGGCAATGTGAGCAGCCAGGCCATCCTGCCACCTGGTTGCCCTTCAGGACCACGG
TGTTCAGAGGAGAAGCTGACTTTCTCTCTGCGTCTGATGGAGGAGAACTGGAACGCTGAGAAGAGGTC
CCCCACCTTCCACTGGGAGATGCAGCCACCTCCAGGCAGAAATCCACACTGGCAGCCACGTGCCACTG
CGGTTGTTTGTGGACACTGCGTGGCCACACCCAGACCAGACAGAAATGCCTCCCCTTATCACACCATCG
TGGACTCCATGGCTGTCTTGTGACGGTCTCACTGATGCCTCTTCTGCATTCAAAGTTCCTCGACCCGG
GCCAGATACACTCCAGTTCACAGTGGATGTCTTCACTTTGCTAATGACTCCAGAAACATGATATACATC
ACCTGCCACCTGAAGGTCACCTAGCTGAGCAGGACCCAGATGAACTCAACAAGGCTGTTCCCTTCAGCA
AGCCTTCCAACAGCTGGTCCCAGTGGAAAGGCTCGGCTGACATCTGTCAATGCTGTAAACAAGGTGACTG
TGGCACTCCAAGCCATTCCAGGAGGCAGCCTCATGTCATGAGCCAGTGGTCCAGGTCTGTTCCCGTAAC
CGCAGGCATGTGACAGAAGAAGCAGATGTACCCTGGGGCCACTGATCTTCTGACAGGAGGGGTGACC
ATGAAGTAGAGCAGTGGGCTTTCCTTCTGACACCTCAGTGGTGTGCTGGGCGTAGGCCTGGCTGTGGT
GGTGTCCCTGACTCTGACTGCTGTATCCTGGTCTCACCAGGAGGTGTCGCACTGCCTCCACCCCTGTG
TCTGCTCCGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG225686 representing NM_001110354
Red=Cloning site Green=Tags(s)

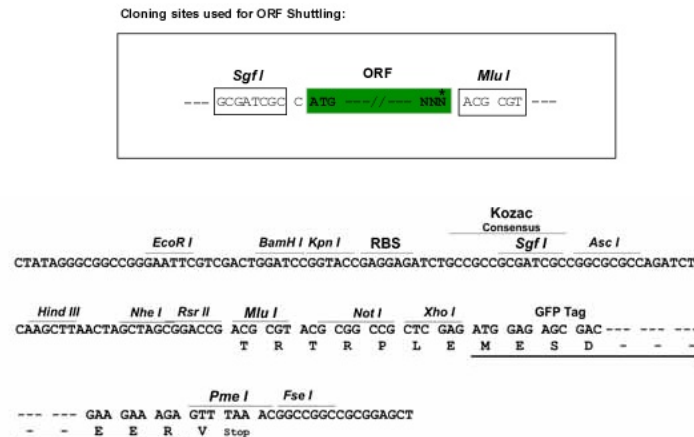
MELSYRLFICLLWLGSTELCYPQPLWLLQGGASHPETSVPVLVEQEAATLMVMVSKDLFGTGKLIIRAAD
 LTLGPEACEPLVSMDDTEVVRFVGLHECGNSMQVTDDALVYSTFLLHDP RPVGNLSIVRTNRAEIPIC
 RYPRQGNVSSQAILPTWLPFRITVFSEEKLTFSRLMEENWNAEKRSPTFHLGDAHLQAEIHTGSHVPL
 RLFVDHCVATPTPDQNASPYHTIVDFHGCLVDGLTDASSAFKVP RP GPD TLQFTVDVVFHFANDSRNMIYI
 TCHLKVTLAEQDPDELNKACSF SKPSNSWFPVEGSADICQCCNKGD CGTPSHSRRQPHVMSQWSRSASRN
 RRHVTEEADVTVGPLIFLDRRGDHEVEQWALPSDTSVLLGVGLAVVSLTLTAVILVLTTRRCRTASHPV
 SASE

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001110354

ORF Size: 1272 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_001110354.2](#)

RefSeq Size: 1317 bp

RefSeq ORF: 1275 bp

Locus ID: 7784

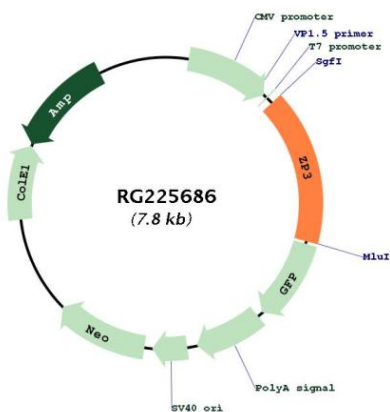
UniProt ID: [P21754](#)

Cytogenetics: 7q11.23

Protein Families: Secreted Protein, Transmembrane

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]

Product images:



Circular map for RG225686