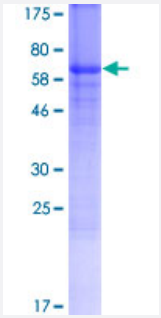
Full-Length

ZP3 (Human) Recombinant Protein (P01)

Catalog # H00007784-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ZP3 full-length ORF (AAI46483.1, 1 a.a. - 373 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MVMVSKDLFGTGKLIRAADLTLGPEACEPLVSMDTEDVVRFEVGLHECGNSMQVTDDALVYSTF LLHDPRPVGNLSIVRTNRAEIPIECRYPRQGNVSSQAILPTWLPFRTTVFSEEKLTFSLRLMEENWN AEKRSPTFHLGDAAHLQAEIHTGSHVPLRLFVDHCVATPTPDQNASPYHTIVDFHGCLVDGLTDA SSAFKVPRPGPDTLQFTVDVFHFANDSRNMIYITCHLKVTLAEQDPDELNKACSFSKPSNSWFPV EGSADICQCCNKGDCGTPSHSRRQPHVMSQWSRSASRNRRHVTEEADVTVGPLIFLDRRGDHE VEQWALPSDTSVVLLGVGLAVVVSLTLTAVILVLTRRCRTASHPVSASE
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	67.98
Interspecies Antigen Sequence	Mouse (69); Rat (67)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ZP3

Entrez GeneID	7784
GeneBank Accession#	BC146482
Protein Accession#	AAI46483.1
Gene Name	ZP3
Gene Alias	ZP3A, ZP3B, ZPC
Gene Description	zona pellucida glycoprotein 3 (sperm receptor)
Omim ID	182889
Gene Ontology	Hyperlink

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
Other Designations	zona pellucida glycoprotein 3|zona pellucida glycoprotein 3A (sperm receptor)|zona pellucida glycoprotein 3B|zona pellucida protein C|zona pellucida sperm-binding protein 3