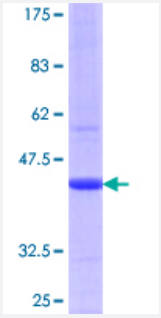
ZP2 (Human) Recombinant Protein (Q01)

Catalog # H00007783-Q01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ZP2 partial ORF (NP_003451.1, 400 a.a. - 509 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	NSSCQPVFEAQSQGLVRFHIPLNGCGTRYKFEDDKVVYENEIHALWTDFPPSKISRDSEFRMTVK CSYSRNDMLLNINVESLTPPVASVKLGPFTLILQSYPDNSYQQPY
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.84
Interspecies Antigen Sequence	Mouse (65); 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 — ZP2

Entrez GeneID	7783
GeneBank Accession#	NM_003460
Protein Accession#	NP_003451.1
Gene Name	ZP2
Gene Alias	ZPA
Gene Description	zona pellucida glycoprotein 2 (sperm receptor)
Omim ID	182888
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 secondary binding and penetration of acrosome-reacted spermatozoa. The nascent protein contains a N-terminal signal peptide sequence, a conserved ZP domain, a consensus furin cleavage site, and a C-terminal 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. [provided by RefSeq
Other Designations	zona pellucida glycoprotein 2|zona pellucida protein A|zona pellucida sperm-binding protein 2