

ZP3 Knockout cell line (A549)

Catalog Number: KO02915

Product Information	
Product Name	ZP3 Knockout cell line (A549)
specification	1*10 ⁶
Storage and transportation	Dry ice preservation/T25 live cell transportation.
Cell morphology	Epithelioid, adherent cell
Passage ratio	1:3~1:4
species	Human
Gene	ZP3
Gene ID	7784
Build method	Electric rotation method / virus method
Mycoplasma testing	Negative
Cultivation system	90% F12K+10% FBS
Parental Cell Line	A549
Quality Control	Genotype: ZP3 Knockout cell line (A549) >95% viability before freezing. All cells were tested and found to be free of bacterial, viruses, mycoplasma and other toxins.

Gene Information	
Gene Official Full Name	zona pellucida glycoprotein 3provided by HGNC
Also known as	ZPC; ZP3A; ZP3B; Zp-3; OOMD3; OZEMA3
Gene Description	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]
Expression	Ubiquitous expression in testis (RPKM 5.0), skin (RPKM 3.3) and 25 other tissues See more