

**ZAR1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16486c****Specification**

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**ZAR1 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q86SH2](#)**ZAR1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 326340**Other Names**

Zygote arrest protein 1, Oocyte-specific maternal effect factor, ZAR1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ZAR1 Antibody (Center) Blocking Peptide - Protein Information****Name** ZAR1 {ECO:0000303|PubMed:12539046, ECO:0000312|HGNC:HGNC:20436}**Function**

mRNA-binding protein that mediates formation of MARDO (mitochondria-associated ribonucleoprotein domain), a membraneless compartment that stores maternal mRNAs in oocytes. MARDO assembly around mitochondria is directed by an increase in mitochondrial membrane potential during oocyte growth. Promotes formation of MARDO phase-separated membraneless compartment by undergoing liquid-liquid phase separation upon binding to maternal mRNAs. Binds to the 3'-UTR of maternal mRNAs. Maternal mRNAs stored in the MARDO are translationally repressed. Essential for female fertility and oocyte-to-embryo transition by coordinating maternal mRNA storage, translation and degradation.

**Cellular Location**

Cytoplasm, Cytoplasmic ribonucleoprotein granule {ECO:0000250|UniProtKB:Q80SU3}. Cytoplasm {ECO:0000250|UniProtKB:Q80SU3}. Note=Specifically localizes to MARDO (mitochondria-associated ribonucleoprotein domain), a mitochondria-associated membraneless compartment that stores mRNAs in oocytes {ECO:0000250|UniProtKB:Q80SU3}

**Tissue Location**

Ovary and testis..

## **ZAR1 Antibody (Center) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

## **ZAR1 Antibody (Center) Blocking Peptide - Images**

## **ZAR1 Antibody (Center) Blocking Peptide - Background**

The female gamete, the oocyte, serves the distinct purpose of transmitting the maternal genome and other maternal factors critical for postovulation events. Oocytes have diverse functions in ovarian folliculogenesis, fertilization, and embryogenesis. ZAR1 is an oocyte-specific gene that appears to function at the oocyte-to-gamete transition (Wu et al., 2003 [PubMed12539046]).

## **ZAR1 Antibody (Center) Blocking Peptide - References**

Shinojima, Y., et al. J. Dermatol. Sci. 59(2):98-106(2010) Uzbekova, S., et al. Reprod. Biol. Endocrinol. 4, 12 (2006) :Wu, X., et al. Biol. Reprod. 69(3):861-867(2003) Wu, X., et al. Nat. Genet. 33(2):187-191(2003)