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ZAR1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16486c

Specification

ZAR1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q86SH2
Other Accession	NP_783318.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**45873**
Antigen Region	**108-137**

ZAR1 Antibody (Center) - Additional Information

Gene ID 326340

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

Target/Specificity
This ZAR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 108-137 amino acids from the Central region of human ZAR1.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ZAR1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ZAR1 Antibody (Center) - 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}

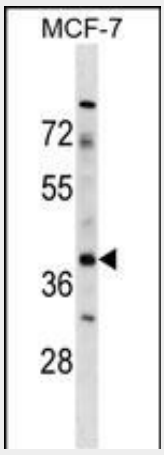
Tissue Location
Ovary and testis..

ZAR1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ZAR1 Antibody (Center) - Images



ZAR1 Antibody (Center) (Cat. #AP16486c) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the ZAR1 antibody detected the ZAR1 protein (arrow).

ZAR1 Antibody (Center) - 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 [PubMed 12539046]).

ZAR1 Antibody (Center) - 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)