

ZAR1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50821

Specification

ZAR1 Antibody - Product Information

Application WB
Primary Accession Q86SH2
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 46 KDa
Antigen Region 248-276

ZAR1 Antibody - Additional Information

Gene ID 326340

Other Names

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

Dilution

WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

ZAR1 Antibody - 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}

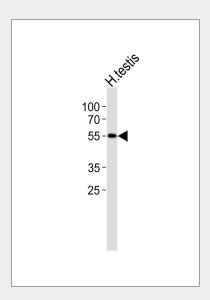
Tissue Location Ovary and testis..

ZAR1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ZAR1 Antibody - Images



Western blot analysis of lysate from human testis tissue lysate, using ZAR1 Antibody, was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

ZAR1 Antibody - Background

Essential for female fertility. May play a role in the oocyte-to-embryo transition (By similarity).

ZAR1 Antibody - References

Wu X.,et al.Nat. Genet. 33:187-191(2003). Wu X.,et al.Biol. Reprod. 69:861-867(2003).