

# ZAR1 Polyclonal Antibody

Catalog # AP73116

## **Product Information**

Application	WB, IHC-P
Primary Accession	<u>Q86SH2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45873

### **Additional Information**

Gene ID	326340
Other Names	ZAR1; Zygote arrest protein 1; Oocyte-specific maternal effect factor
Dilution	WB~~1:1000 IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## **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

# Background

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

#### Images



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