

Anti-ZAR1 Antibody

Rabbit polyclonal antibody to ZAR1 Catalog # AP61023

Product Information

Rat

Additional Information

Gene ID	326340
Other Names	Zygote arrest protein 1; Oocyte-specific maternal effect factor
Target/Specificity	Recognizes endogenous levels of ZAR1 protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ZAR1. The exact sequence is proprietary.

Images



Western blot analysis of ZAR1 expression in mouse testis (A), rat testis (B) whole cell lysates.

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