10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GRPEL1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17977c

Product Information

Application	WB, E
Primary Accession	Q9HAV7
Other Accession	NP_079472.1
Reactivity	Human
Predicted	Bovine, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38265
Calculated MW	24279
Antigen Region	116-142

Additional Information

Gene ID	80273
Other Names	GrpE protein homolog 1, mitochondrial, HMGE, Mt-GrpE#1, GRPEL1, GREPEL1
Target/Specificity	This GRPEL1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 116-142 amino acids from the Central region of human GRPEL1.
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	GRPEL1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GRPEL1 (HGNC:19696)
Synonyms	GREPEL1
Function	Nucleotide exchange factor (NEF) for mitochondrial HSP70 (mt-

HSP70/HSPA9), facilitating the release of ADP from HSPA9 to allow ATP rebinding, which is essential for the chaperone cycle (PubMed:28848044). Functions as a component of the presequence translocase-associated motor (PAM) complex, which drives ATP-dependent import of proteins into the mitochondrial matrix. In the PAM complex, supports the HSPA9-driven pulling mechanism that translocates polypeptides through the TIM23 complex (PubMed:28848044). May control the nucleotide-dependent binding of HSPA9 to substrate proteins (PubMed:11311562).

Cellular Location Mitochondrion matrix

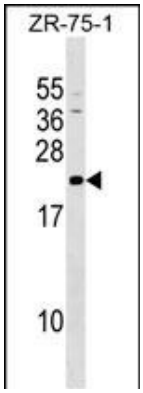
Background

Essential component of the PAM complex, a complex required for the translocation of transit peptide-containing proteins from the inner membrane into the mitochondrial matrix in an ATP-dependent manner. Seems to control the nucleotide-dependent binding of mitochondrial HSP70 to substrate proteins.

References

Borges, J.C., et al. J. Biol. Chem. 278(37):35337-35344(2003)
Choglay, A.A., et al. Gene 267(1):125-134(2001)

Images



GRPEL1 Antibody (Center) (Cat. #AP17977c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the GRPEL1 antibody detected the GRPEL1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.