

**GRPEL2 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP56217**

**Specification**

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**GRPEL2 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q8TAA5</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GRPEL2
Epitope Specificity	33-130/225
Isotype	IgG
<b>Purity</b> affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion matrix.
SIMILARITY	Belongs to the grpE family.
Important Note	<b>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.</b>

**Background Descriptions**

GrpEL2 (GrpE protein homolog 2) is a 225 amino acid mitochondrial matrix protein and component of the PAM complex. Consisting of Tim44, Tim14, HSP 70, Magmas, GrpEL1 and GrpEL2, the PAM complex plays an essential role in the ATP-dependent translocation of transit peptide-containing proteins to the mitochondrial matrix from the inner membrane. GrpEL2 regulates the nucleotide-dependent binding of mitochondrial HSP70 to substrate proteins and stimulates its ATPase activity. The gene encoding GrpEL2 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

**GRPEL2 Polyclonal Antibody - Additional Information**

**Gene ID** 134266

**Other Names**

GrpE protein homolog 2, mitochondrial, Mt-GrpE#2, GRPEL2

**Dilution**

IHC-P~~N/A  
IHC-F~~N/A

=<span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_E">E~~N/A</span>

#### Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## GRPEL2 Polyclonal Antibody - Protein Information

**Name** GRPEL2

#### Function

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. Stimulates ATPase activity of mt-HSP70. May also serve to modulate the interconversion of oligomeric (inactive) and monomeric (active) forms of mt-HSP70 (By similarity).

#### Cellular Location

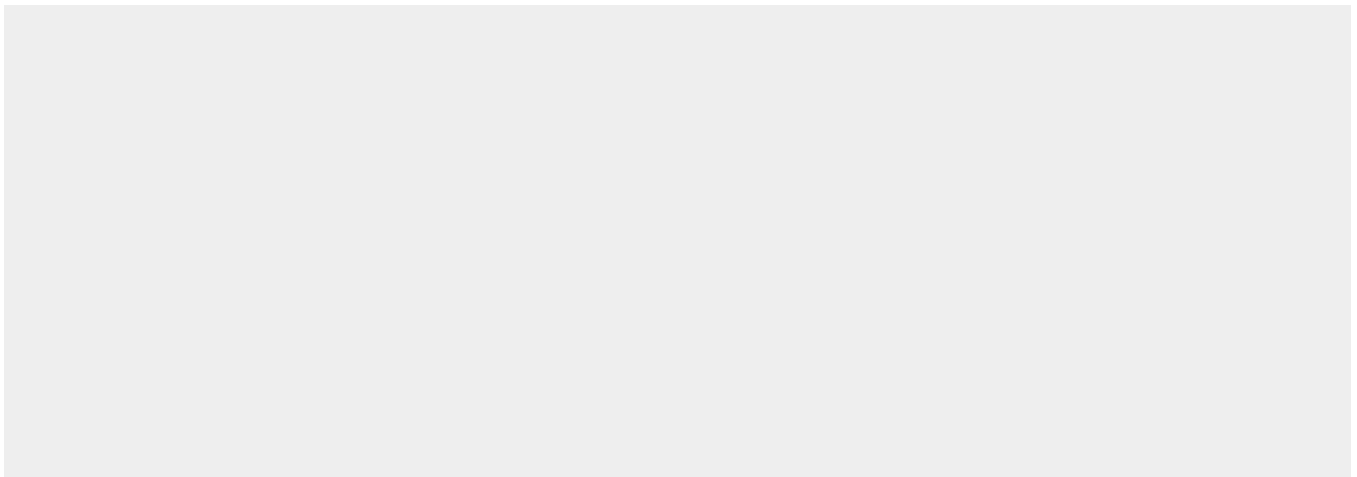
Mitochondrion matrix.

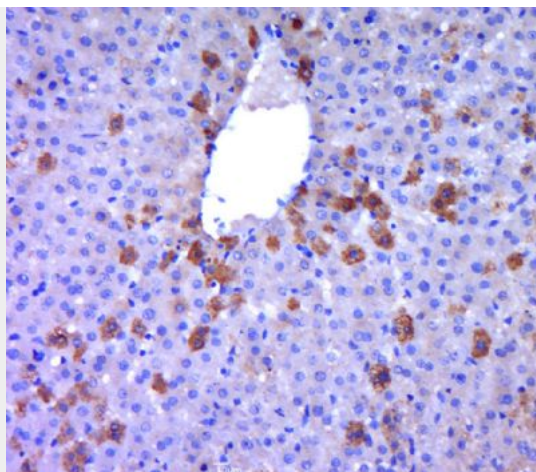
## GRPEL2 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## GRPEL2 Polyclonal Antibody - Images





Paraformaldehyde-fixed, paraffin embedded (rat liver tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GRPEL2) Polyclonal Antibody, Unconjugated (bs-16325R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.