

**Anti-PARL (RABBIT) Antibody**  
**PARL Antibody**  
**Catalog # ASR5680****Specification**

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**Anti-PARL (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Rat, Human, Mouse, Chicken
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-PARL antibody is useful for ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~42.2 kDa corresponding to the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	PARL affinity purified antibody was prepared from whole rabbit serum produced by repeated immunization from a synthetic peptide corresponding to the C terminus region of human PARL.
Stabilizer	50% (v/v) Glycerol

**Anti-PARL (RABBIT) Antibody - Additional Information****Gene ID** 55486**Other Names**  
55486**Purity**

Anti-PARL was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific towards PARL. A BLAST analysis was used to suggest cross-reactivity with Human, Mouse, Rat, Chicken, and Primate based on 100% sequence homology. Cross-reactivity with PARL (presenilin associated, rhomboid-like) from other sources has not been determined.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-PARL (RABBIT) Antibody - Protein Information

**Name** PARL

**Synonyms** PSARL

### Function

Required for the control of apoptosis during postnatal growth. Essential for proteolytic processing of an antiapoptotic form of OPA1 which prevents the release of mitochondrial cytochrome c in response to intrinsic apoptotic signals (By similarity). Required for the maturation of PINK1 into its 52kDa mature form after its cleavage by mitochondrial-processing peptidase (MPP) (PubMed:<a href="http://www.uniprot.org/citations/22354088" target="\_blank">22354088</a>). Promotes cleavage of serine/threonine-protein phosphatase PGAM5 in damaged mitochondria in response to loss of mitochondrial membrane potential (PubMed:<a href="http://www.uniprot.org/citations/22915595" target="\_blank">22915595</a>). Mediates differential cleavage of PINK1 and PGAM5 depending on the health status of mitochondria, disassociating from PINK1 and associating with PGAM5 in response to mitochondrial membrane potential loss (PubMed:<a href="http://www.uniprot.org/citations/22915595" target="\_blank">22915595</a>). Required for processing of CLPB into a form with higher protein disaggregase activity by removing an autoinhibitory N-terminal peptide (PubMed:<a href="http://www.uniprot.org/citations/28288130" target="\_blank">28288130</a>, PubMed:<a href="http://www.uniprot.org/citations/32573439" target="\_blank">32573439</a>). Promotes processing of DIABLO/SMAC in the mitochondrion which is required for DIABLO apoptotic activity (PubMed:<a href="http://www.uniprot.org/citations/28288130" target="\_blank">28288130</a>). Also required for cleavage of STARD7 and TTC19 (PubMed:<a href="http://www.uniprot.org/citations/28288130" target="\_blank">28288130</a>). Promotes changes in mitochondria morphology regulated by phosphorylation of P-beta domain (PubMed:<a href="http://www.uniprot.org/citations/14732705" target="\_blank">14732705</a>, PubMed:<a href="http://www.uniprot.org/citations/17116872" target="\_blank">17116872</a>).

### Cellular Location

Mitochondrion inner membrane; Multi-pass membrane protein

## Anti-PARL (RABBIT) 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](#)

## Anti-PARL (RABBIT) Antibody - Images

## Anti-PARL (RABBIT) Antibody - Background

PARL (presenilin associated, rhomboid-like) encodes a mitochondrial integral membrane protein. Following proteolytic processing of this protein, a small peptide (P-beta) is formed and translocated to the nucleus. This gene may be involved in signal transduction via regulated intramembrane proteolysis of membrane-tethered precursor proteins. Variation in this gene has been associated

with increased risk for type 2 diabetes. Alternative splicing results in multiple transcript variants encoding different isoforms. Anti-PARL antibodies are ideal for researchers interested in Apoptosis, Alzheimer's Research, Neuroscience, and Mitochondrial Fusion Proteins research.