

### **ABCE1 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58064

# **Specification**

### **ABCE1 Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, E

**Primary Accession** P61221 Reactivity Rat, Bovine Host Rabbit Clonality **Polyclonal** 67 KDa

Calculated MW **Physical State** Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human ABCE1

331-430/599 **Epitope Specificity** 

Isotype **Purity** 

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Mitochondrion. Note=Localized

to clusters of virus formation at the plasma

membrane.

**SIMILARITY** Belongs to the ABC transporter

superfamily. ABCE family. Contains 2

4Fe-4S ferredoxin-type domains.Contains 2

ABC transporter domains.

**SUBUNIT** Probably heterodimerizes with RNASEL:

this interaction inhibits the RNASEL. Associates with HIV-1 Vif and HIV-1, HIV-2

and SIV Gag proteins.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

### **Background Descriptions**

ABCE1 is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the OABP subfamily. It is alternatively referred to as the RNase L inhibitor as it functions to block the activity of ribonuclease L(referenced from entrez gene).

### **ABCE1 Polyclonal Antibody - Additional Information**

**Gene ID** 6059

### **Other Names**

ATP-binding cassette sub-family E member 1, 2'-5'-oligoadenylate-binding protein, HuHP68, RNase



L inhibitor, Ribonuclease 4 inhibitor, RNS4I, ABCE1, RLI, RNASEL1, RNASELI, RNS4I

#### **Dilution**

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<span class ="dilution_WB">WB~~1:1000</span><br \> <span class
="dilution_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution_IF">IF~~1:50~200</span><br \> <span class ="dilution_E">E~~N/A</span>
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### **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.

# **ABCE1 Polyclonal Antibody - Protein Information**

Name ABCE1

Synonyms RLI, RNASEL1, RNASELI, RNS4I

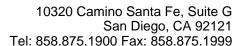
#### **Function**

Nucleoside-triphosphatase (NTPase) involved in ribosome recycling by mediating ribosome disassembly (PubMed: <a href="http://www.uniprot.org/citations/20122402" target=" blank">20122402</a>, PubMed:<a href="http://www.uniprot.org/citations/21448132" target="blank">21448132</a>). Able to hydrolyze ATP, GTP, UTP and CTP (PubMed:<a href="http://www.uniprot.org/citations/20122402" target=" blank">20122402</a>). Splits ribosomes into free 60S subunits and tRNA- and mRNA-bound 40S subunits (PubMed: <a href="http://www.uniprot.org/citations/20122402" target="\_blank">20122402</a>, PubMed:<a href="http://www.uniprot.org/citations/21448132" target="\_blank">21448132</a>). Acts either after canonical termination facilitated by release factors (ETF1/eRF1) or after recognition of stalled and vacant ribosomes by mRNA surveillance factors (PELO/Pelota) (PubMed: <a href="http://www.uniprot.org/citations/20122402" target=" blank">20122402</a>, PubMed:<a href="http://www.uniprot.org/citations/21448132" target="blank">21448132</a>). Involved in the No-Go Decay (NGD) pathway: recruited to stalled ribosomes by the Pelota-HBS1L complex, and drives the disassembly of stalled ribosomes, followed by degradation of damaged mRNAs as part of the NGD pathway (PubMed: <a href="http://www.uniprot.org/citations/21448132" target=" blank">21448132</a>). Also plays a role in quality control of translation of mitochondrial outer membrane- localized mRNA (PubMed: <a href="http://www.uniprot.org/citations/29861391" target="\_blank">29861391</a>). As part of the PINK1-regulated signaling, ubiquitinated by CNOT4 upon mitochondria damage; this modification generates polyubiquitin signals that recruit autophagy receptors to the mitochondrial outer membrane and initiate mitophagy (PubMed:<a href="http://www.uniprot.org/citations/29861391" target=" blank">29861391</a>). RNASEL-specific protein inhibitor which antagonizes the binding of 2-5A (5'-phosphorylated 2'.5'-linked oligoadenylates) to RNASEL (PubMed: <a href="http://www.uniprot.org/citations/9660177" target=" blank">9660177</a>). Negative regulator of the anti-viral effect of the interferon-regulated 2-5A/RNASEL pathway (PubMed: <a href="http://www.uniprot.org/citations/11585831" target=" blank">11585831</a>, PubMed:<a href="http://www.uniprot.org/citations/9660177" target=" blank">9660177</a>, PubMed:<a href="http://www.uniprot.org/citations/9847332" target="blank">9847332</a>).

# **Cellular Location**

Cytoplasm. Mitochondrion

### **ABCE1 Polyclonal Antibody - Protocols**

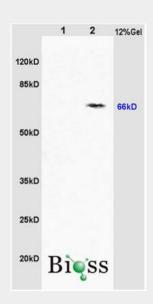




Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **ABCE1 Polyclonal Antibody - Images**



# Sample:

Brain (Rat) Lysate at 40 ug Liver (Rat) Lysate at 40 ug

Primary: Anti-ABCE1 (bs-2948R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (bs-0295G-HRP) at 1/5000 dilution

Predicted band size: 67 kD Observed band size: 66 kD