

ABCE1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP16149b**Specification**

ABCE1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P61221](#)**ABCE1 Antibody (C-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ABCE1 Antibody (C-term) Blocking Peptide - Protein Information**Name** ABCE1**Synonyms** RLI, RNASEL1, RNASELI, RNS4I**Function**

Nucleoside-triphosphatase (NTPase) involved in ribosome recycling by mediating ribosome disassembly (PubMed: [20122402](http://www.uniprot.org/citations/20122402), PubMed: [21448132](http://www.uniprot.org/citations/21448132)). Able to hydrolyze ATP, GTP, UTP and CTP (PubMed: [20122402](http://www.uniprot.org/citations/20122402)). Splits ribosomes into free 60S subunits and tRNA- and mRNA-bound 40S subunits (PubMed: [20122402](http://www.uniprot.org/citations/20122402), PubMed: [21448132](http://www.uniprot.org/citations/21448132)). 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: [20122402](http://www.uniprot.org/citations/20122402), PubMed: [21448132](http://www.uniprot.org/citations/21448132)). 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: [21448132](http://www.uniprot.org/citations/21448132))

target="_blank">21448132). Also plays a role in quality control of translation of mitochondrial outer membrane- localized mRNA (PubMed:29861391). 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:29861391). RNASEL-specific protein inhibitor which antagonizes the binding of 2-5A (5'-phosphorylated 2',5'-linked oligoadenylates) to RNASEL (PubMed:9660177). Negative regulator of the anti-viral effect of the interferon-regulated 2-5A/RNASEL pathway (PubMed:9660177, PubMed:9847332, PubMed:11585831).

Cellular Location

Cytoplasm. Mitochondrion

ABCE1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ABCE1 Antibody (C-term) Blocking Peptide - Images

ABCE1 Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene 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. Alternatively referred to as the RNase L inhibitor, this protein functions to block the activity of ribonuclease L. Activation of ribonuclease L leads to inhibition of protein synthesis in the 2-5A/RNase L system, the central pathway for viral interferon action. Two transcript variants encoding the same protein have been found for this gene.

ABCE1 Antibody (C-term) Blocking Peptide - References

Huang, B., et al. Int. J. Mol. Med. 25(5):687-693(2010) Pisarev, A.V., et al. Mol. Cell 37(2):196-210(2010) Crawford, D.C., et al. Genes Immun. 10(8):715-721(2009) Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009) Shea, P.R., et al. Prostate 68(4):354-359(2008)