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ABCE1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58064

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P61221
Reactivity	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67314
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ABCE1
Epitope Specificity	331-430/599
Isotype	IgG
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).

Additional Information

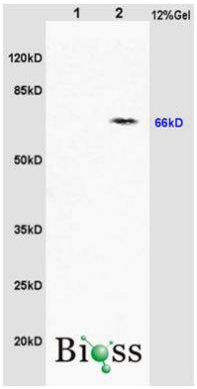
Gene ID	6059
Other Names	ATP-binding cassette sub-family E member 1, 2'-5'-oligoadenylate-binding protein, HuHP68, RNase L inhibitor, Ribonuclease 4 inhibitor, RNS4I, ABCE1, RLI, RNASEL1, RNASELI, RNS4I
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

Protein Information

Name	ABCE1
Synonyms	RLI, RNASEL1, RNASELI, RNS4I
Function	Nucleoside-triphosphatase (NTPase) involved in ribosome recycling by mediating ribosome disassembly (PubMed:20122402, PubMed:21448132). Able to hydrolyze ATP, GTP, UTP and CTP (PubMed:20122402). Splits ribosomes into free 60S subunits and tRNA- and mRNA-bound 40S subunits (PubMed:20122402, PubMed: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, PubMed: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). 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:11585831, PubMed:9660177, PubMed:9847332).
Cellular Location	Cytoplasm. Mitochondrion

Images



Sample:
Brain (Rat) Lysate at 40 ug
Liver (Rat) Lysate at 40 ug
Primary: Anti-ABCE1 (AP58064) 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