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Goat Anti-ABCE1/ RNAse L inhibitor Antibody

Peptide-affinity purified goat antibody
Catalog # AF1014a

Specification

Goat Anti-ABCE1/ RNAse L inhibitor Antibody - Product Information

Application	**WB, E**
Primary Accession	P61221
Other Accession	NP_001035809, 6059, 24015 (mouse), 361390 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**67314**

Goat Anti-ABCE1/ RNAse L inhibitor 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
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-ABCE1/ RNAse L inhibitor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ABCE1/ RNAse L inhibitor Antibody - 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

Goat Anti-ABCE1/ RNAse L inhibitor 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 Cytomety
- Cell Culture

Goat Anti-ABCE1/ RNAse L inhibitor Antibody - Images

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AF1014a (0.3 µg/ml) staining of A431 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ABCE1/ RNAse L inhibitor Antibody - 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.

Goat Anti-ABCE1/ RNAse L inhibitor Antibody - References

A small interfering ABCE1-targeting RNA inhibits the proliferation and invasiveness of small cell lung cancer. Huang B, et al. Int J Mol Med, 2010 May. PMID 20372810.
The role of ABCE1 in eukaryotic posttermination ribosomal recycling. Pisarev AV, et al. Mol Cell, 2010 Jan 29. PMID 20122402.
An excess of rare genetic variation in ABCE1 among Yorubans and African-American individuals with HIV-1. Crawford DC, et al. Genes Immun, 2009 Dec. PMID 19657357.
Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
Association study between single-nucleotide polymorphisms in 199 drug-related genes and commonly measured quantitative traits of 752 healthy Japanese subjects. Saito A, et al. J Hum Genet, 2009 Jun. PMID 19343046.