

ABCE1 (L-19): sc-49337

BACKGROUND

ABCE1 (RNS4I, RLI) is a mediator of the 2-5A/RNase L pathway. The 2-5A/RNase L system is considered an essential pathway of interferon (IFN) action. In the pathway, IFN stimulation activates 2-5A synthetases which convert ATP into a set of atypical oligomers known as 2-5A. These oligomers in turn activate RNase L (RNS4), which leads to inhibition of protein synthesis by cleaving mRNAs at the 3-prime side of UpNp sequences. This inhibition necessitates the association of ABCE1 with RNase L and is dependent on the ratio between the two proteins. The 2-5A/RNase L system could also play a more general physiological role, for instance, in the regulation of RNA stability in mammalian cells.

REFERENCES

1. Iida, A., et al. 2002. Catalog of 605 single-nucleotide polymorphisms (SNPs) among 13 genes encoding human ATP-binding cassette transporters: ABCA4, ABCA7, ABCA8, ABCD1, ABCD3, ABCD4, ABCE1, ABCF1, ABCG1, ABCG2, ABCG4, ABCG5 and ABCG8. *J. Hum. Genet.* 47: 285-310.
2. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601213. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Shichijo, S., et al. 2005. ABCE1, a member of ATP-binding cassette transporter gene, encodes peptides capable of inducing HLA-A2-restricted and tumor-reactive cytotoxic T lymphocytes in colon cancer patients. *Oncol. Rep.* 13: 907-913.
4. Lingappa, J.R., et al. 2006. Basic of HIV-1 gag with ABCE1 (HP68), a cellular protein important for HIV-1 capsid assembly. *J. Biol. Chem.* 281: 3773-3784.

CHROMOSOMAL LOCATION

Genetic locus: ABCE1 (human) mapping to 4q31.21; Abce1 (mouse) mapping to 8 C2.

SOURCE

ABCE1 (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABCE1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49337 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

ABCE1 (L-19) is recommended for detection of ABCE1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ABCE1 (L-19) is also recommended for detection of ABCE1 in additional species, including equine, canine, bovine, porcine and avian.

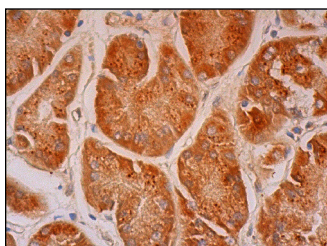
Suitable for use as control antibody for ABCE1 siRNA (h): sc-60117, ABCE1 siRNA (m): sc-60118, ABCE1 shRNA Plasmid (h): sc-60117-SH, ABCE1 shRNA Plasmid (m): sc-60118-SH, ABCE1 shRNA (h) Lentiviral Particles: sc-60117-V and ABCE1 shRNA (m) Lentiviral Particles: sc-60118-V.

Molecular Weight of ABCE1: 67 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



ABCE1 (L-19): sc-49337. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.