

Store at
-20C
#95513**ABCE1 (F3S8L) Rabbit Monoclonal Antibody**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene ID:
W	H M R Mk	Endogenous	67	Rabbit IgG	#P61221	6059

Product Usage Information

Application
Western Blotting

Dilution
1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA, 50% glycerol, and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

Specificity/Sensitivity

ABCE1 (F3S8L) Rabbit Monoclonal Antibody recognizes endogenous levels of total ABCE1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro575 of human ABCE1 protein.

Background

ATP-binding cassette sub-family E1 (ABCE1), also known as HP68 or RNase L inhibitor (RLI), was originally discovered to regulate RNase L, an endoribonuclease in the interferon (IFN) pathway (1,2). ABC transporters are involved in DNA repair, chromatin maintenance, and translation, though ABCE1 lacks transmembrane domains other members contain (3-5). ABCE1 is a highly conserved protein from archaea to eukaryotes and plays many essential roles in the RNA lifecycle. It is capable of binding initiation factors eIF2alpha and eIF5 to assist in mRNA translation (6). ABCE1 is also capable of binding release factors eRF1 and eRF3 to contribute to translation termination, and can additionally dissociate stalled and vacant ribosomes during translation (7-9). During HIV infection, the virus can utilize ABCE1 to help form viral capsids (10,11). Furthermore, ABCE1 also contributes to the silencing of RNA interference (12). ABCE1 protein expression is high in lung adenocarcinoma and contributes to Myc driven cancers (13,14).

Background References

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12. Kärblane, K. et al. (2015) *PLoS One* 10, e0116702.
13. Ren, Y. et al. (2012) *Oncol Rep* 27, 965-70.
14. Gao, J. et al. (2020) *Cancer Res* 80, 3706-3718.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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