

Product Datasheet

ABCE1 Antibody - BSA Free NB400-116

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Publications: 6

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB400-116

Updated 9/9/2025 v.20.1

Earn rewards for product
reviews and publications.

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/NB400-116



NB400-116

ABCE1 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	68 kDa

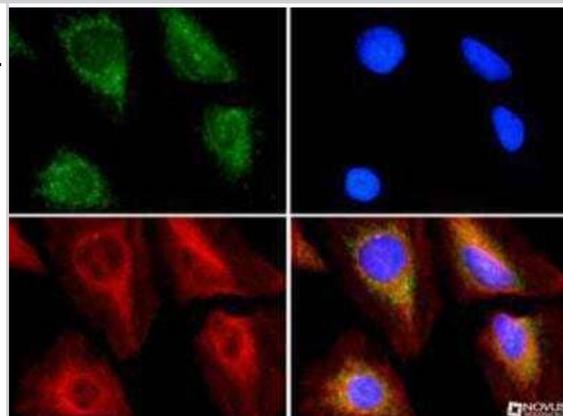
Product Description	
Description	Novus Biologicals Rabbit ABCE1 Antibody - BSA Free (NB400-116) is a polyclonal antibody validated for use in WB, ICC/IF and IP. Anti-ABCE1 Antibody: Cited in 6 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	6059
Gene Symbol	ABCE1
Species	Human, Monkey
Reactivity Notes	Monkey reactivity reported in scientific literature (PMID: 25227463).
Immunogen	A fusion protein containing amino acids 1-119 of human ABCE1 [UniProt# P61221]

Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunoprecipitation
Recommended Dilutions	Western Blot 1:250-1:1000, Immunocytochemistry/ Immunofluorescence 2-5 ug/ml, Immunoprecipitation 1:1000
Application Notes	This ABCE1 antibody is useful for Immunoprecipitation, Immunocytochemistry/Immunofluorescence, and Western Blot. In ICC/IF, mitochondrial staining was observed in HeLa cells. In Western Blot, a band was seen ~68 kD representing ABCE1. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

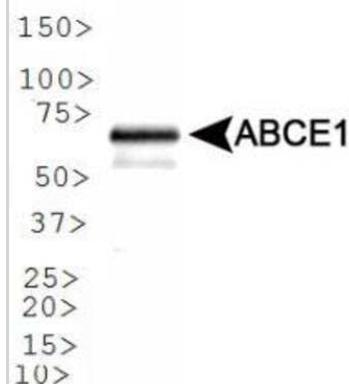


Images

Immunocytochemistry/Immunofluorescence: ABCE1 Antibody [NB400-116] - ABCE1 antibody was tested in HeLa cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).



Western Blot: ABCE1 Antibody [NB400-116] - WB analysis of ABCE1 in A431 lysate.



Immunocytochemistry/Immunofluorescence: ABCE1 Antibody [NB400-116] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton-X100. The cells were incubated with anti-ABCE1 at 2 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:500 dilution. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse Dylight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Publications

Evgeniya V Smirnova, Therese S Collingwood, Catherine Bisbal, Oxana M Tsygankova, Marina Bogush, Judy L Meinkoth, Earl E Henderson, Roland S Annan, Alexander Y Tsygankov TULA proteins bind to ABCE-1, a host factor of HIV-1 assembly, and inhibit HIV-1 biogenesis in a UBA-dependent fashion. *Virology* 2008-03-19 [PMID: 18006034]

Zhu X, Zhang H, Mendell JT Ribosome Recycling by ABCE1 Links Lysosomal Function and Iron Homeostasis to 3' UTR-Directed Regulation and Nonsense-Mediated Decay *Cell Rep* 2020-07-14 [PMID: 32668236]

Wu Z, Wang Y, Lim J et al. Ubiquitination of ABCE1 by NOT4 in Response to Mitochondrial Damage Links Co-translational Quality Control to PINK1-Directed Mitophagy *Cell Metab.* 2018-05-18 [PMID: 29861391] (WB, Human)

Desmet E, Anguish L, Parker J Virus-mediated compartmentalization of the host translational machinery. *MBio* 2014-09-16 [PMID: 25227463] (WB, ICC/IF, Monkey)

Toompuu M, Karblane K, Pata P et al. ABCE1 is essential for S phase progression in human cells. *Cell Cycle.* 2016-03-17 [PMID: 26985706] (ICC/IF, Human)

Chen, ZQ et al. The essential vertebrate ABCE1 protein interacts with eukaryotic initiation factors. *J Biol Chem*;281(11):7452-7. 2006-03-17 [PMID: 16421098]



Procedures

Immunoprecipitation protocol for ABCE1 Antibody (NB400-116)

ABCE1 Antibody:

Immunoprecipitation Procedure

1. Add 1ug rabbit IgG to 0.5 ml supernatant from HeLa or HEK293 cell line lysate*
2. Add 20 ul protein G plus/protein A-agarose beads
3. React for 1 hour @ RT in rolling oven or shaker
4. Spin down agarose beads and draw the supernatant
5. Add 1-2 ul of anti-ABCE1 (NB 400-116) to 0.5 ml of the cell lysate supernatant
6. React for 4 hours @ RT in rolling over
7. Add 50 ul protein G plus/protein A-agarose to ABCE1 solution for 1 hour in rolling oven @ RT
8. Spin down agarose beads and washed beads 3x with RIPA buffer (+protease inhibitors)
9. Add 2x 50 ul SDS loading buffer (+DTT) to the beads
10. Heat mixture for 10 minutes @ 85 degrees celcius
11. Spin reaction mixture @ 12K rpm for 5 minutes

* Cell line lysate = 75 cm flask dish culture, nearly confluent / 0.5 ml Pierce mammalian protein extraction buffer + protease inhibitors cocktail (100:1 was added for lysate) / lysate centrifuged 12K rpm for 10 min.

**The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

Western Blot protocol for ABCE1 Antibody (NB400-116)

ABCE1 Antibody:

Western Blot Procedure

1. Run 20 ul of immunoprecipitated protein on a 10% SDS polyacrylamide gel
2. Transfer protein to Immobilon-P nylon membrane: 60mA for 2 hours
3. Block membrane with 5% non-fat milk in PBS + 0.4% Tween-20 [PBS-T] for 1 hour @ RT or overnight @ 4C
4. Wash membrane with PBS-T, 3x [15 min., 5 min., 5 min.], shaking gently
5. Incubate membrane with 1:500 dilution of anti-ABCE1 (NB 400-116), diluted in PBS-T, for 1 hour @ RT
6. Wash membrane with PBS-T, 3x [15 min., 5 min., 5 min.], shaking gently
7. Incubate membrane with anti-rabbit IgG-HRP secondary, diluted in PBS-T, for 1 hour @ RT
8. Wash membrane with more than 100 ml of PBS-T at least 3x (for an 8x6 cm blot)
9. Detect cross-reacting proteins using a Chemiluminescence Reagent kit: expose ~5 seconds

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

Immunocytochemistry/Immunofluorescence protocol for ABCE1 Antibody (NB400-116)

ABCE1 Antibody:

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NB400-116

NB800-PC1	HeLa Whole Cell Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB400-116

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications

