Product Datasheet ABCG8 Antibody (1B10A5) - BSA Free NBP1-71706

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.





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NBP1-71706

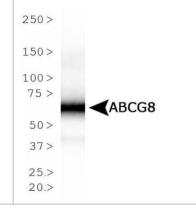
ABCG8 Antibody (1B10A5) - BSA Free

| Product Information | |
|-----------------------------|---|
| Unit Size | 0.1 ml |
| Concentration | 1 mg/ml |
| Storage | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles. |
| Clonality | Monoclonal |
| Clone | 1B10A5 |
| Preservative | 0.05% Sodium Azide |
| Isotype | IgG |
| Purity | Protein G purified |
| Buffer | PBS |
| Product Description | |
| Host | Mouse |
| Gene ID | 64241 |
| Gene Symbol | ABCG8 |
| Species | Human, Mouse |
| Immunogen | Full length mouse ABCG8 [Swiss-Prot# Q9DBM0] |
| Product Application Details | |
| Applications | Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Knockout Validated |
| Recommended Dilutions | Western Blot 1:1000, Immunohistochemistry 1:100, Immunocytochemistry/ Immunofluorescence 1:100, Immunoprecipitation 25 ug, Immunohistochemistry- Paraffin 1:100, Knockout Validated |
| Application Notes | This ABCG8 (clone 1B10A5) antibody is useful for Western blot, Immunoprecipitation, Immunocytochemistry/Immunofluorescence and Immunohistochemistry on paraffin-embedded sections. |



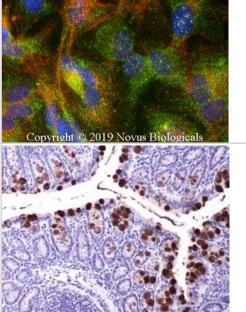
Images

Western Blot: ABCG8 Antibody (1B10A5) [NBP1-71706] - Analysis of ABCG8 expression in ABCG8 lysate using NBP1-71706.



Immunocytochemistry/Immunofluorescence: ABCG8 Antibody (1B10A5) [NBP1-71706] - HepG2 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.1% Saponin. The cells were incubated with anti-ABCG8 Antibody (1B10A5) at 2 ug/ml overnight at 4C and detected with an anti-mouse Dylight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.

Immunohistochemistry: ABCG8 Antibody (1B10A5) [NBP1-71706] -Immunohistochemical analysis of ABCG8 in mouse intestine using NBP1 -71706.





Publications

Xue C, Zeng P, Gong K et Al. Nogo-B inhibition facilitates cholesterol metabolism to reduce hypercholesterolemia Cell Rep 2024-09-03 [PMID: 39235944]

Yan-Yong Xu, Fen Du, Bing Meng, Guang-Hui Xie, Jia Cao, Daping Fan, Hong Yu Hepatic overexpression of methionine sulfoxide reductase A reduces atherosclerosis in apolipoprotein E-deficient mice Journal of Lipid Research 2015-10-01 [PMID: 26318157]

Wang JQ, Li LL, Hu A Et al. Inhibition of ASGR1 decreases lipid levels by promoting cholesterol excretion Nature 2022-08-03 [PMID: 35922515] (WB)

Details:

Citation using the FITC version of this antibody.

Poole B Classification and Effect of Correctors on Sitosterolemia-Associated Mutants in ABCG8 Thesis 2022-01-01 (WB, Human)

Nyandwi JB, Ko YS, Jin H Et al. Rosmarinic Acid Exhibits a Lipid-Lowering Effect by Modulating the Expression of Reverse Cholesterol Transporters and Lipid Metabolism in High-Fat Diet-Fed Mice Biomolecules 2021-10-06 [PMID: 34680102] (WB, Mouse)

Li Zhiqiang, Kabir Inamul, Tietelman Gladys et al. Sphingolipid de novo biosynthesis is essential for intestine cell survival and barrier function. Cell Death & Disease 2018-02-07 [PMID: 29415989] (WB, Mouse)

Johnson BJ, Lee JY, Pickert A, Urbatsch IL. Bile acids stimulate ATP hydrolysis in the purified cholesterol transporter ABCG5/G8 Biochemistry. 2010-04-27 [PMID: 20210363] (WB, Human)

Xie Yan, Fung Ho Yee Joyce, Newberry Elizabeth P et al. Hepatic Mttp deletion reverses gallstone susceptibility in L-Fabp knockout mice. J Lipid Res. 2014-01-28 [PMID: 24474819] (Mouse)

von Kampen O, Buch S, Nothnagel M et al. Genetic and functional identification of the likely causative variant for cholesterol gallstone disease at the ABCG5/8 lithogenic locus. Hepatology 2012-08-16 [PMID: 22898925] (ICC/IF, Human)

Wang J, Grishin N, Kinch L, Cohen JC, Hobbs HH, Xie XS. Sequences in the nonconsensus nucleotide-binding domain of ABCG5/ABCG8 required for sterol transport. J Biol Chem;286(9):7308-14. 2011-03-04 [PMID: 21209088] (WB, Mouse)

Wang J, Zhang DW, Lei Y, Xu F, Cohen JC, Hobbs HH, Xie XS. Purification and reconstitution of sterol transfer by native mouse ABCG5 and ABCG8. Biochemistry;47(18):5194-204. 2008-05-06 [PMID: 18402465] (WB, ICC/IF, IP, Mouse)

Zhang DW, Graf GA, Gerard RD, Cohen JC, Hobbs HH. Functional asymmetry of nucleotide-binding domains in ABCG5 and ABCG8. J Biol Chem;281(7):4507-16. 2006-02-17 [PMID: 16352607] (WB, IP, Mouse)

More publications at http://www.novusbio.com/NBP1-71706

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Procedures

Western Blot Protocol Specific for NBP1-71706: ABCG8 Antibody (1B10A5)

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.

2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.

3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.

4. Rinse the blot.

5. Block the membrane using standard blocking buffer for at least 1 hour.

6. Wash the membrane in wash buffer three times for 10 minutes each.

7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.

8. Wash the membrane in wash buffer three times for 10 minutes each.

9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.

10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).

11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

*Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

Immunohistochemistry-Paraffin protocol for ABCG8 Antibody (NBP1-71706)

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:

- 1. Wash sections in deionized water three times for 5 minutes each.
- 2. Wash sections in wash buffer for 5 minutes.
- 3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
- 4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
- 5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
- 6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
- 7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
- 8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
- 9. Wash sections three times in wash buffer for 5 minutes each.
- 10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
- 11. As soon as the sections develop, immerse slides in deionized water.
- 12. Counterstain sections in hematoxylin.
- 13. Wash sections in deionized water two times for 5 minutes each.

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- 14. Dehydrate sections.
- 15. Mount coverslips.

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





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Products Related to NBP1-71706

| NBP1-71706F | ABCG8 Antibody (1B10A5) [FITC] |
|----------------|---|
| NBP1-97019-5mg | Mouse IgG Isotype Control |
| NB720-B | Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin] |
| HAF007 | Goat anti-Mouse IgG Secondary Antibody [HRP] |

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.

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