

# Product Datasheet

## ABCG2/CD338 Antibody (3G8) - BSA Free NBP2-22124

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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**NBP2-22124**

ABCG2/CD338 Antibody (3G8) - BSA Free

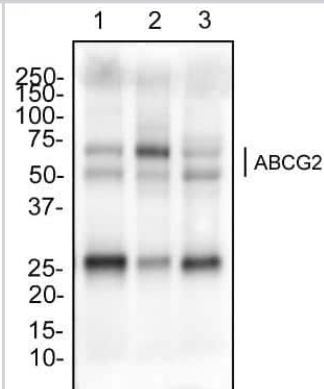
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	3G8
Preservative	0.03% Sodium Azide
Isotype	IgG1
Purity	Ammonium sulfate precipitation
Buffer	PBS
Target Molecular Weight	60-70 kDa

Product Description	
Host	Mouse
Gene ID	9429
Gene Symbol	ABCG2
Species	Human, Mouse, Primate
Marker	Stem Cell Marker
Immunogen	Purified recombinant fragment of human ABCG2 expressed in E. coli. [Uniprot: Q9UNQ0]

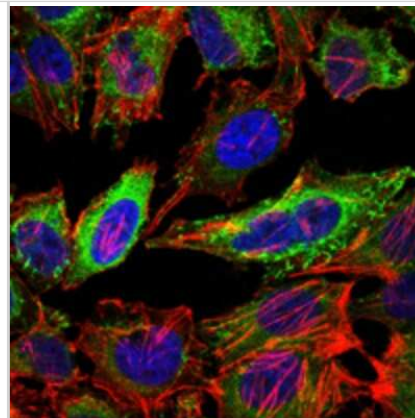
Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:500-1:2000, Flow Cytometry 1:200-1:400, ELISA 1:10000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:200-1:1000, Immunohistochemistry-Paraffin 1:200-1:1000
Application Notes	In Western blot, a dimer can be seen at 60-70 kDa representing ABCG2.

**Images**

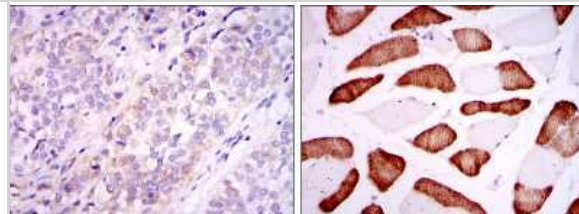
Western Blot: ABCG2/CD338 Antibody (3G8) [NBP2-22124] - Analysis of ABCG2 expression in (1) human small intestine, (2) human placenta and (3) mouse placenta tissue extracts.



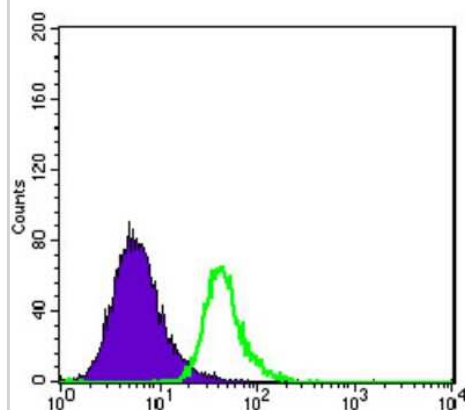
Immunocytochemistry/Immunofluorescence: ABCG2/CD338 Antibody (3G8) [NBP2-22124] - Analysis of Hela cells using ABCG2 mouse mAb (green). DRAQ5 fluorescent DNA dye (blue). Actin filaments have been labeled with Alexa Fluor-555 phalloidin (red).



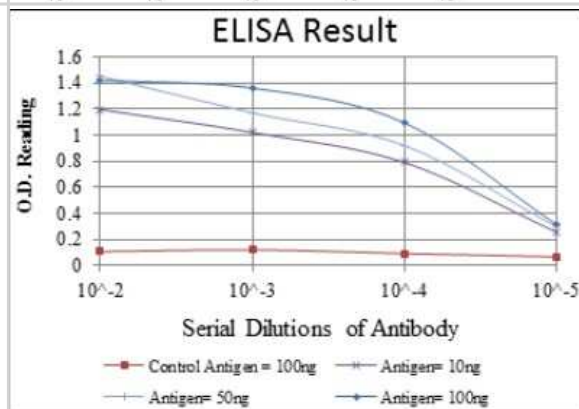
Immunohistochemistry-Paraffin: ABCG2/CD338 Antibody (3G8) [NBP2-22124] - Analysis of paraffin-embedded bladder cancer tissues (left) and skeletal muscle tissues (right) using ABCG2 mouse mAb with DAB staining.



Flow Cytometry: ABCG2/CD338 Antibody (3G8) [NBP2-22124] - Analysis of HepG2 cells using ABCG2 mouse mAb (green) and negative control (purple).



ELISA: ABCG2/CD338 Antibody (3G8) [NBP2-22124] - Red: Control Antigen (100ng), Purple: Antigen (10ng), Green: Antigen (50ng), Blue: Antigen (100ng).



## Publications

Fridman LB, Knerler S, Price AS et al. Cocaine Regulates Antiretroviral Therapy CNS Access Through Pregnane-X Receptor-Mediated Drug Transporter and Metabolizing Enzyme Modulation at the Blood Brain Barrier bioRxiv 2023-08-02 [PMID: 37546800] (Western Blot, Immunocytochemistry/ Immunofluorescence)

Bhadwal P, Randhawa V, Vaiphei K et al. Clinical relevance of CERK and SPHK1 in breast cancer and their association with metastasis and drug resistance Scientific reports 2022-10-29 [PMID: 36309544] (WB, Human)

Details:

Dilution used in WB 1:1000

Yamamoto S, Fukuhara H, Seki H Et Al. Predictors of therapeutic efficacy of 5-aminolevulinic acid-based photodynamic therapy in human prostate cancer Photodiagnosis and photodynamic therapy 2021-07-21 [PMID: 34303032] (IHC-P)

Huang R, Zhu L, Zhang Y XIST lost induces ovarian cancer stem cells to acquire taxol resistance via a KMT2C-dependent way Cancer cell international 2020-09-04 [PMID: 32943985] (WB, Human)

Sridharan S, Robeson M, Bastihalli-Tukaramrao D, et al. Targeting of the Eukaryotic Translation Initiation Factor 4A Against Breast Cancer Stemness Front Oncol 2019-12-06 [PMID: 31867270] (WB, Human)

Erdogan S, Turkecul K, Dibirdik I et al. Midkine downregulation increases the efficacy of quercetin on prostate cancer stem cell survival and migration through PI3K/AKT and MAPK/ERK pathway Biomed. Pharmacother. 2018-08-21 [PMID: 30142541] (WB, Human)

Agarwalla P, Mukherjee S, Sreedhar B, Banerjee R. Glucocorticoid receptor-mediated delivery of nano gold-witahaferin conjugates for reversal of epithelial-to-mesenchymal transition and tumor regression. Nanomedicine (Lond) 2016-10-01 [PMID: 27622735]

Mondal SK, Jinka S, Pal K et al. Glucocorticoid Receptor-Targeted Liposomal Codelivery of Lipophilic Drug and Anti-Hsp90 Gene: Strategy to Induce Drug-Sensitivity, EMT-Reversal, and Reduced Malignancy in Aggressive Tumors. Mol. Pharm. 2016-07-05 [PMID: 27184196] (WB)



## Procedures

### Flow Cytometry protocol for ABCG2/CD338 Antibody (NBP2-22124)

ABCG2/CD338 Antibody (3G8):

Flow Cytometry Protocol

Solutions and Reagents:

1X PBS

Blocking buffer: 0.5% BSA in 1X PBS

Filter buffer: 0.1% Triton-X100 and Blocking buffer

Ice cold 4% paraformaldehyde (1% solution -optional for storing samples)

Fluorescently-conjugated secondary antibody (various forms)

Protocol

- 2.1. Collect  $1 \times 10^6$  cells/sample.
- 2.2. Wash cells once with blocking buffer.
- 2.3. Fix cells with 4% paraformaldehyde and incubate at 4C for 30 min.
- 2.4 Permeabilize cells: Add 0.5 ml filter buffer(0.1% Triton-X100 and Blocking buffer) and incubate at 0 degree C for 15 min.
- 2.4. Wash cells once with blocking buffer.
- 2.5. Add 0.5 ml filter buffer and incubate at 0C for 15 min.
- 2.6. Wash cells twice with blocking buffer.
- 2.7. Incubate cells in blocking buffer for 10 min at room temperature.
- 2.8. Add primary antibody at the appropriate dilution and incubate for 30 min at room temperature.
- 2.9. Wash twice with blocking buffer and incubate with fluorescently-conjugated secondary antibody for 30 min at room temperature.
- 2.10. Wash cells twice with blocking buffer.
- 2.11. Re-suspend cells in 1X PBS and analyze on flow cytometry. Samples can be kept in 1% paraformaldehyde at 4C overnight.

Advice: Keep the cells in the dark on ice or at 4C in a fridge until your scheduled time for analysis. Analyze the cells on the flow cytometer as soon as possible.





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### **Products Related to NBP2-22124**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
NBP3-27492	Human ABCG2/CD338 ELISA Kit (Colorimetric)

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### **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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