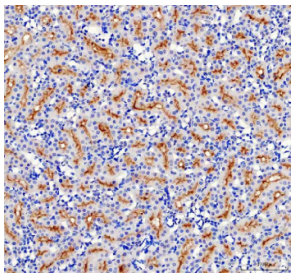
# ABCG2 Antibody / BCRP (R32353)

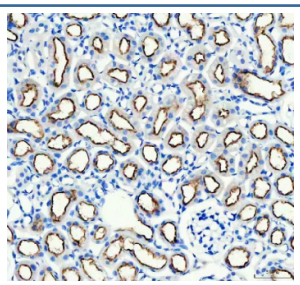
| Catalog No. | Formulation | Size |
|---|---|---|
| R32353 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

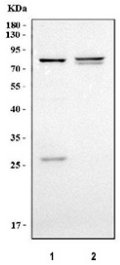
| | |
|---|---|
| **Availability** | 1-2 days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | Q9UNQ0 |
| **Localization** | Cytoplasm, cell membrane |
| **Applications** | Western Blot : 0.5-1ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml |
| **Limitations** | This ABCG2 antibody is available for research use only. |



IHC staining of FFPE rat kidney tissue with ABCG2 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE mouse kidney tissue with ABCG2 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.




Western blot testing of 1) human A549 and 2) human placenta tissue lysate with ABCG2 antibody. Predicted molecular weight ~72 kDa and ~67 kDa (two isoforms).

## Description

ABCG2 (ATP-binding cassette sub-family G member 2), also known as the Breast Cancer Resistance Protein (BCRP), is a transmembrane transporter belonging to the ATP-binding cassette (ABC) family. This protein functions as an efflux pump that exports a wide variety of substrates, including drugs, xenobiotics, and metabolic byproducts, across cellular membranes. An ABCG2 antibody is often used to study multidrug resistance, pharmacokinetics, and the regulation of transporter activity in different tissues.

ABCG2 is broadly expressed in the intestine, liver, kidney, placenta, and blood-brain barrier, where it limits the absorption and distribution of drugs. It plays a protective role by preventing the accumulation of potentially harmful compounds in sensitive tissues. Because of this, ABCG2 strongly influences drug bioavailability and elimination. A ABCG2 antibody provides a powerful tool to evaluate its expression patterns and functional regulation in both physiological and pharmacological contexts.

Overexpression of ABCG2 has been widely documented in cancer cells, where it contributes to multidrug resistance by actively pumping chemotherapeutic agents out of the cell. It is also considered a stem cell marker, as side-population cells with high ABCG2 activity exhibit stem-like properties and enhanced drug efflux capacity. Employing a ABCG2 antibody allows researchers to monitor its role in cancer biology, stem cell regulation, and therapeutic resistance.

NSJ Bioreagents provides a high-quality ABCG2 antibody validated for applications such as western blot, immunohistochemistry, and flow cytometry. By selecting an ABCG2 antibody from NSJ Bioreagents, researchers gain a reliable tool for exploring drug transport, resistance mechanisms, and stem cell biology.

## Application Notes

Optimal dilution of the ABCG2 antibody should be determined by the researcher.

## Immunogen

Amino acids RENLQFSAALRLATTMTNHEKNERINRVIQEL of human ABCG2/BCRP protein were used as the immunogen for the ABCG2 antibody.

## Storage

After reconstitution, the ABCG2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.