Human BCRP Vesicles, ABC transporter vesicles

Cat. No. BCRP Vesicles-07H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human BCRP Vesicles are insect derived purified plasma membranes with inserted BCRP transport protein (Breast Cancer Resistance Protein, ABCG2). Our Human BCRP Vesicles can be used to evaluate test compounds and drug interactions with BCRP in in vitro assays. BSEP is an ATP-binding cassette (ABC) transporter associated with multidrug resistance, which carries various anti-cancer drugs such as topotecan, methotrexate and mitoxantrone.
Species	Human
Source	Insect Cells
Description	Human BCRP Vesicles are part of a larger group of transporter vesicles known as ABC transporter vesicles. They are prepared from purified plasma membranes isolated from an insect cell system (Sf9 cells transfected with baculovirus) expressing BCRP. It is highly expressed in tumors like lung cancer and also in small intestinal epithelial cells, hepatic parenchymal cells, proximal renal tubule cells, and cerebrovascular endothelial cells. It is thought to be an important determinant of drug disposition, through its role in processes such as absorption at the small intestine, excretion into bile and urine, and transfer across the blood-brain barrier to the CNS.
Form	Frozen
Concept Behind ABC Transporter Vesicles	ABC transporter vesicles are easy-to-use, efficient reagents for early assessment of a drug candidate's substrate and drug interaction potential. While ABC transporters

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	typically mediate the export of substrates out of cells, transporters expressed on these inside-out vesicles import substrates into the vesicles. It is therefore possible to quantitatively evaluate transport activity for your compound by determining the amount incorporated into the vesicles.
Clear and Reliable Results	Prepared from Sf9 cells which have been engineered to over-express specific ABC transporters, these 'inside-out' vesicles provide high levels of transporter activity with low background, giving you a clear signal if your compound is a substrate or inhibitor of a specific efflux transporter.
Applications	Use Human BCRP Vesicles to: • Investigate the transporter interactions of your drug candidates • Assess potential for transporter-mediated drug-drug interactions • Obtain high quality results with a large signal to noise ratios
Notes	For Research Use Only. Not intended for animal or human therapeutic or diagnostic use. For Research Use Only. Not for use in diagnostic procedures.
Storage	Store in ultracold freezer (-60 to -85 centigrade) and protect from light.
Shipping	Dry Ice

GENE INFORMATION

Gene Name	ABCG2 ATP binding cassette subfamily G member 2 (JR blood group) [Homo sapiens (human)]
Official Symbol	ABCG2
Synonyms	ABCG2; ATP-binding cassette, sub-family G (WHITE), member 2; ATP-binding cassette sub-family G member 2; ABCP; BCRP; CD338; EST157481; MXR; ABC transporter; placenta specific MDR protein; breast cancer resistance protein; ATP-

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	binding cassette transporter G2; mitoxantrone resistance-associated protein; placenta-specific ATP-binding cassette transporter; multi drug resistance efflux transport ATP-binding cassette sub-family G (WHITE) member 2; MRX; BMDP; MXR1; ABC15; BCRP1; GOUT1; CDw338; UAQTL1; MGC102821;
Gene ID	9429
mRNA Refseq	NM_001257386
Protein Refseq	NP_001244315
MIM	603756
UniProt ID	Q9UNQ0

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