

PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	ABCG2
Synonyms	ABC15; ABCP; BCRP; BCRP1; BMDP; CD338; CDw338; EST157481; GOUT1; MRX; MXR; MXR-1; MXR1; UAQTL1
Description	Human ABCG2 full length protein-synthetic nanodisc
Uniprot ID	Q9UNQ0
Protein Families	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways	ABC transporters
Molecular Weight	The human full length ABCG2 protein has a MW of 72.3 kDa
Delivery	In Stock
Formulation & Reconstitution	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
Storage&Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	The membrane-associated protein is included in the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the White subfamily. Alternatively referred to as a breast cancer resistance protein, this protein functions as a xenobiotic transporter which may play a major role in multi-drug resistance. It likely serves as a cellular defense mechanism in response to mitoxantrone and anthracycline exposure. Significant expression of this protein has been observed in the placenta, which may suggest a potential role for this molecule in placenta tissue.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate ABCG2-Nanodisc 0.2 μ g Human ABCG2-Nanodisc per well

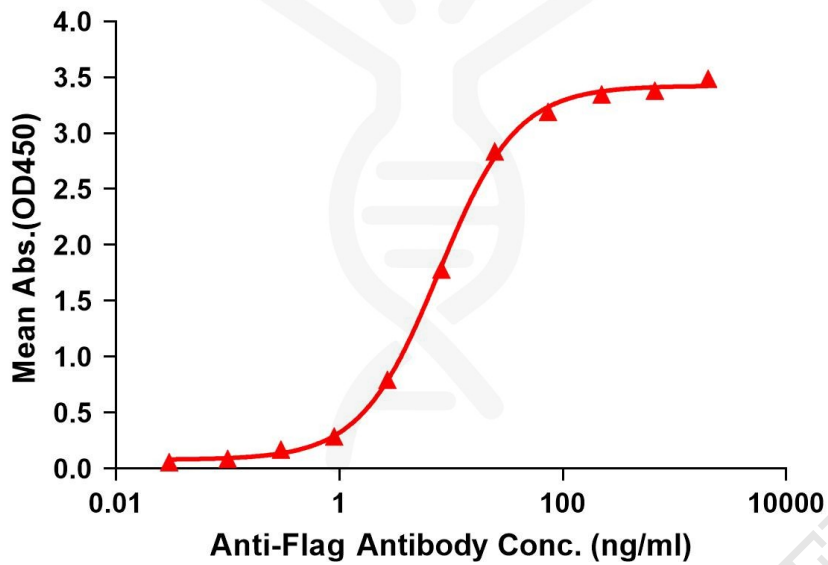


Figure 1. Elisa plates were pre-coated with Flag Tag ABCG2-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with ABCG2-Nanodisc is 7.753ng/ml.

kDa M R

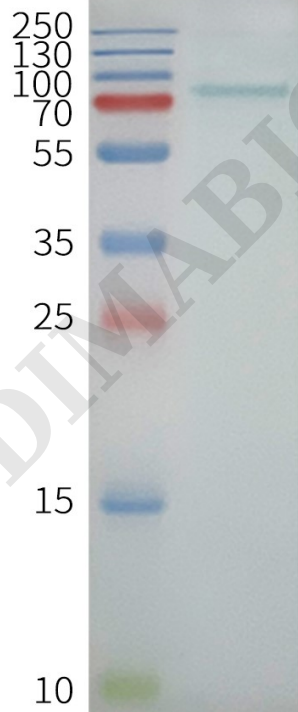


Figure 2. Human ABCG2-Nanodisc, Flag Tag on SDS-PAGE

