Recombinant Human ABCG2 protein (His Tag)

Catalog Number: PDEH101078

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

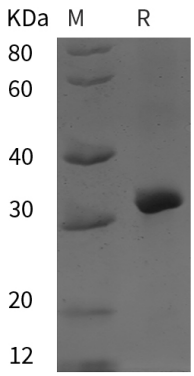
Description

Species	Human
Source	E.coli-derived Human ABCG2 protein Met1-Gly300, with an N-terminal His
Calculated MW	32.9 kDa
Observed MW	32 kDa
Accession	Q9UNQ0
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



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Background

Hematopoietic stem cells are known to express a membrane transporter molecule, known as P-glycoprotein (Pgp), that is encoded by the multidrug resistance gene 1 (MDR1) . Expression of Pgp appears to confer a proliferative advantage to stem cells through its anti-apoptotic effects . An additional transporter molecule known as ABCG2 (ATP-binding cassette gene 2) or Bcrp1 (Breast cancer resistance protein 1), first identified in a breast cancer cell line, is expressed on stem cells . ABCG2 belongs to a family of molecules that span the cell membrane six times and can exist as either homo or hetero dimers linked by a short intracellular flexible linker region that plays an important role in the efflux of a wide range of substrates