

PRODUCT INFORMATION

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| Tag | C-Flag&Strep Tag |
| Target | MDR-1 |
| Synonyms | ABCB1; CD243; CLCS; GP170; MDR1; p-170; P-GP; PGY1 |
| Description | Human MDR-1-Strep full length protein-synthetic nanodisc |
| Delivery | 6~8weeks |
| Uniprot ID | P08183 |
| Expression Host | HEK293 |
| Protein Families | Druggable Genome, ES Cell Differentiation/IPS, Transmembrane |
| Protein Pathways | ABC transporters |
| Molecular Weight | The human full length MDR-1-Strep protein has a MW of 141.5 kDa |
| 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 of reconstitution. |
| 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 encoded by this gene is a member of 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 MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier. Mutations in this gene are associated with colchicine resistance and Inflammatory bowel disease 13. Alternative splicing and the use of alternative promoters results in multiple transcript variants. |
| Usage | Research use only |
| Conjugate | Unconjugated |

