

HDFP774

Product Information

Product SKU:	HDFP774	Expression Host:	HEK293	Size:	10µg
Target:	MDR-1	Tag:	C-Flag&Strep Tag		

Additional Information

Conjugate:	Unconjugated	Uniprot ID:	P08183
Molecular Weight:	The human full length MDR-1-Strep protein has a MW of 141.5 kDa		

Protein Information

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.

Synonyms: ABCB1; CD243; CLCS; GP170; MDR1; p-170; P-GP; PGY1

Protein Description: Human MDR-1-Strep full length protein-synthetic nanodisc

Formulation: 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.

Protein Pathways: ABC transporters.

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane.

Usage: Research use only

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.