

PeptiNanodisc Full-length Multi-pass Transmembrane Recombinant Protein

PeptiNanodisc is DIMA Biotech's newly developed product for delivering high-quality, full-length recombinant membrane proteins in a detergent-free and lipid-free format. It provides stable, soluble membrane proteins that retain native-like structure and activity, making them ready for immediate use in downstream applications. Traditional methods rely on detergents for membrane protein solubilization, which can compromise protein stability and function. Lipid-based nanodisc systems offer an alternative but may introduce unwanted membrane interactions, particularly in cell-based assays. PeptiNanodisc overcomes these limitations by using specially engineered synthetic peptides to replace both detergents and lipids. Following mild detergent extraction, these peptides shield hydrophobic transmembrane regions, resulting in purified membrane proteins that remain stable in solution without the need for lipids. What is new in this product is its fully lipid-free design, which significantly reduces the risk of membrane fusion and assay interference. This makes PeptiNanodisc particularly well-suited for cell-based functional assays, drug screening, and signaling studies. The product is compatible with a wide range of membrane protein targets, regardless of size or complexity. PeptiNanodisc offers a reliable and user-friendly solution for researchers seeking functional membrane proteins with improved stability and assay performance.