

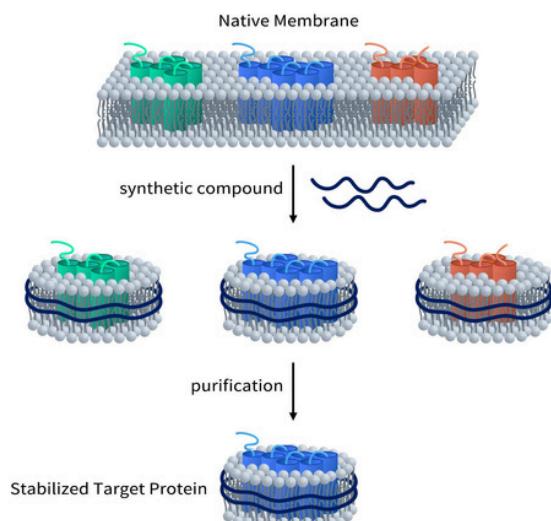


Synthetic Nanodisc

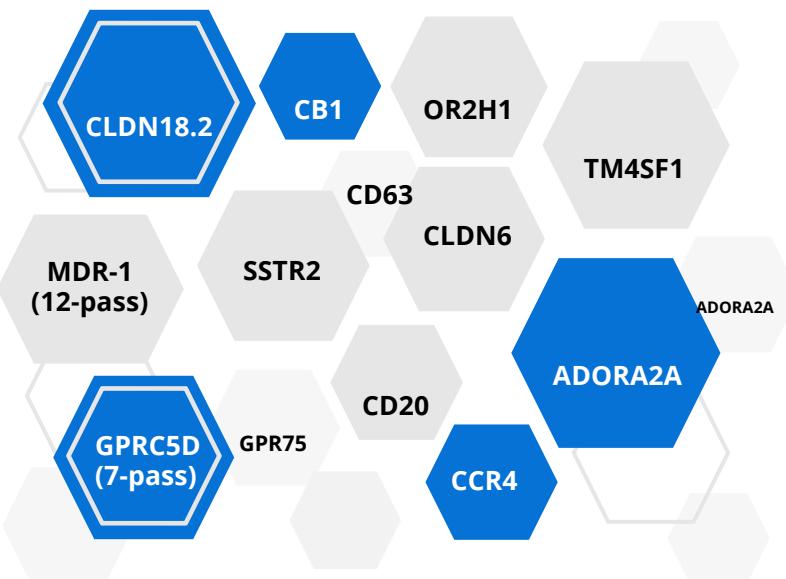
Synthetic Nanodisc

Unlike other membrane scaffold protein (MSP) Nanodisc on the market, synthetic Nanodisc developed by DIMA Bio can be prepared directly from the cells. The polymers used during this process have a dual function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can then be purified by affinity purification.

Nanodisc Platform



Off-the-shelf Target Proteins



Advantages

- Highly purified membrane proteins
- High solubility in aqueous solutions
- High stability
- Proteins are in a native membrane
- environment and remain biologically active
- No detergent and can be used for cell-based assays
- assays
- No MSP backbone proteins



Applications

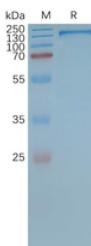
- ELISA
- SPR affinity analysis
- Phage display screening
- Immunization Cell based assays
- Protein crystal structure analysis



Case Studies

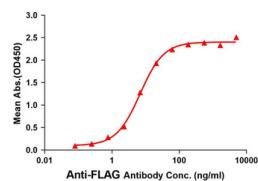
MDR-1

MDR-1-synthetic nanodisc (12 pass transmembrane protein)



Human MDR-1-Nanodisc,
Flag Tag on SDS-PAGE

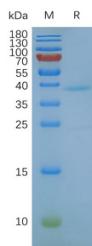
ELISA assay to evaluate MDR-1-Nanodisc
0.2μg Human MDR-1-Nanodisc per well



MDR-1-Nanodisc (Cat.NO.FLP100029)
can bind anti-Flag monoclonal
antibody and the EC50 is 6.883ng/ml.

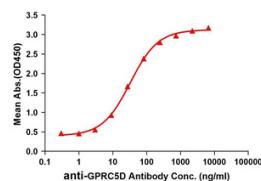
GPRC5D

GPRC5D -synthetic nanodisc (7 pass transmembrane protein)



Human GPRC5D-Nanodisc,
Flag Tag on SDS-PAGE

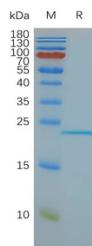
ELISA assay to evaluate GPRC5D-Nanodisc
0.5μg Human GPRC5D-Nanodisc per well



GPRC5D-Nanodisc (Cat.NO.FLP100011)
can bind anti-GPRC5D monoclonal
antibody(DME100090) and the EC50 is
32.86ng/ml.

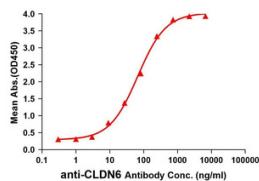
Claudin 6

Claudin6 -synthetic nanodisc (4 pass transmembrane protein)



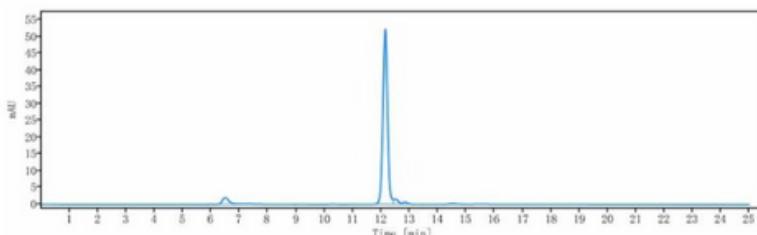
Human CLDN6-Nanodisc,
Flag Tag on SDS-PAGE

ELISA assay to evaluate CLDN6-Nanodisc
0.5μg Human CLDN6 Nanodisc per well



CLDN6-Nanodisc (Cat.NO.FLP100008)
can bind anti-CLDN6 monoclonal
antibody (BME100082) and the EC50 is
66.99ng/ml.

SEC-HPLC



The purity of Human
SLC7A11-Nanodisc is
greater than 90% as
determined by SEC-HPLC.

Featured Synthetic Nanodisc Products

Target	Catalog Number	Product Name
TRPA1	FLP100033	Human TRPA1 full length protein-synthetic nanodisc
CCR8	FLP100037	Human CCR8 full length protein-synthetic nanodisc
CLDN6	FLP100008	Human CLDN6 full length protein-synthetic nanodisc
TSHR1	FLP100045	Human TSHR1 full length protein-synthetic nanodisc
CCR5	FLP100100	Human CCR5 full length protein-synthetic nanodisc
TSPAN8	FLP100088	Human TSPAN8 full length protein-synthetic nanodisc
TAS1R3	FLP100154	Human TAS1R3 full length protein-synthetic nanodisc
TAS1R2	FLP100155	Human TAS1R2 full length protein-synthetic nanodisc
CCR3	FLP100075	Human CCR3 full length protein-synthetic nanodisc
CXCR3	FLP100053	Human CXCR3 full length protein-synthetic nanodisc
GIPR	FLP100130	Human GIPR full length protein-synthetic nanodisc
CCR2	FLP100028	Human CCR2 full length protein-synthetic nanodisc
CCR4	FLP100024	Human CCR4 full length protein-synthetic nanodisc
P2RX7	FLP100049	Human P2RX7 full length protein-synthetic nanodisc
CXCR4	FLP100074	Human CXCR4 full length protein-synthetic nanodisc



Nanodisc Website



Complete Nanodisc
Product List