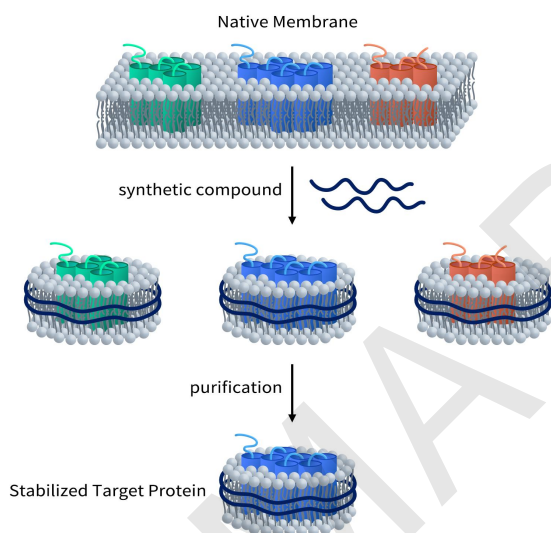


Synthetic Nanodisc

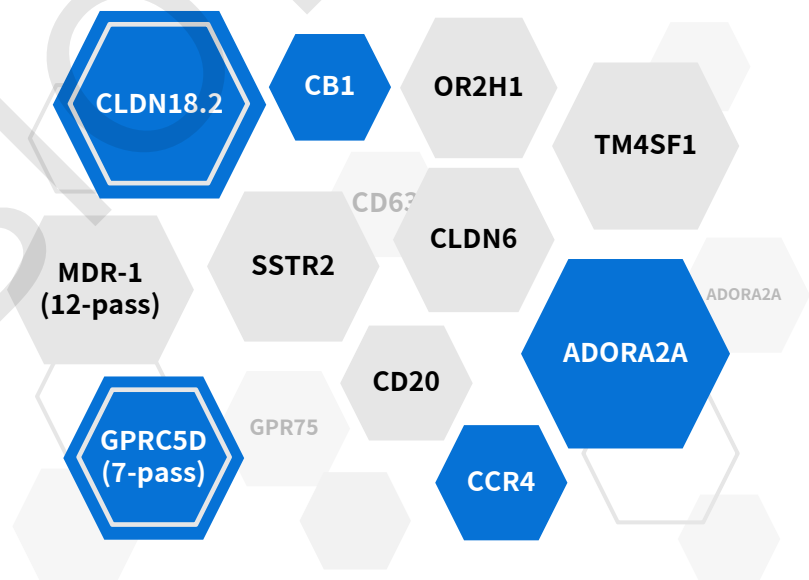
Synthetic Nanodisc

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



On-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
- No MSP backbone proteins



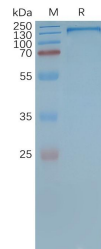
Applications:

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

Case Studies

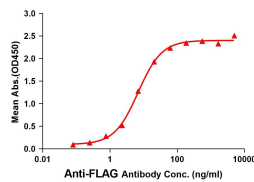
MDR-1

MDR-1-synthetic nanodisc
(12 transmembrane protein)



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

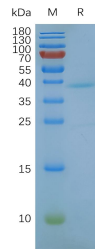
ELISA assay to evaluate MDR-1-Nanodisc
0.2µg Human MDR-1-Nanodisc per well



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

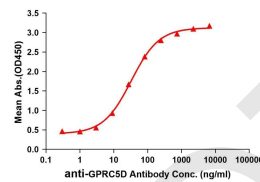
GPRC5D

GPRC5D -synthetic nanodisc
(7 transmembrane protein)



Human GPRC5D-Nanodisc,
Flag Tag on SDS-PAGE

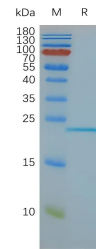
ELISA assay to evaluate GPRC5D-Nanodisc
0.5µg Human GPRC5D-Nanodisc per well



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

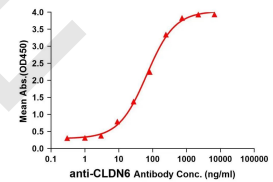
Claudin 6

Claudin6 -synthetic nanodisc
(4 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.

Full length protein-synthetic nanodisc

Target	Catalog Number	Product Name
CLDN6	FLP100008	Human CLDN6 full length protein-synthetic nanodisc
GPRC5D	FLP100011	Human GPRC5D full length protein-synthetic nanodisc
SSTR2	FLP100013	Human SSTR2 full length protein-synthetic nanodisc
CLDN18.2	FLP100014	Human CLDN18.2 full length protein-synthetic nanodisc
ADORA2A	FLP100020	Human ADORA2A full length protein-synthetic nanodisc
TM4SF1	FLP100022	Human TM4SF1 full length protein-synthetic nanodisc
CB1	FLP100023	Human CB1 full length protein-synthetic nanodisc
CCR4	FLP100024	Human CCR4 full length protein-synthetic nanodisc
OR2H1	FLP100025	Human OR2H1 full length protein-synthetic nanodisc
CD20	FLP100027	Human CD20 full length protein-synthetic nanodisc
CCR2	FLP100028	Human CCR2 full length protein-synthetic nanodisc
MDR-1	FLP100029	Human MDR-1 full length protein-synthetic nanodisc
CD63	FLP100030	Human CD63 full length protein-synthetic nanodisc
GPR75	FLP100031	Human GPR75 full length protein-synthetic nanodisc
SLC25A4	FLP100032	Human SLC25A4 full length protein-synthetic nanodisc
TRPA1	FLP100033	Human TRPA1 full length protein-synthetic nanodisc
TSPAN33	FLP100035	Human TSPAN33 full length protein-synthetic nanodisc
F2RL1	FLP100036	Human F2RL1 full length protein-synthetic nanodisc
CCR8	FLP100037	Human CCR8 full length protein-synthetic nanodisc