

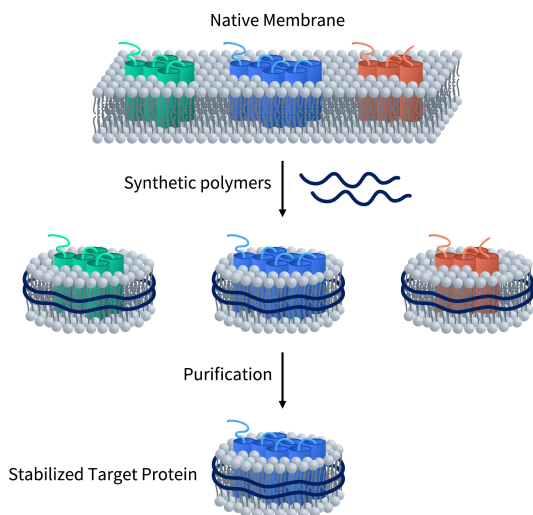
# Synthetic Nanodisc / 合成纳米盘

## Synthetic Nanodisc (合成纳米盘)

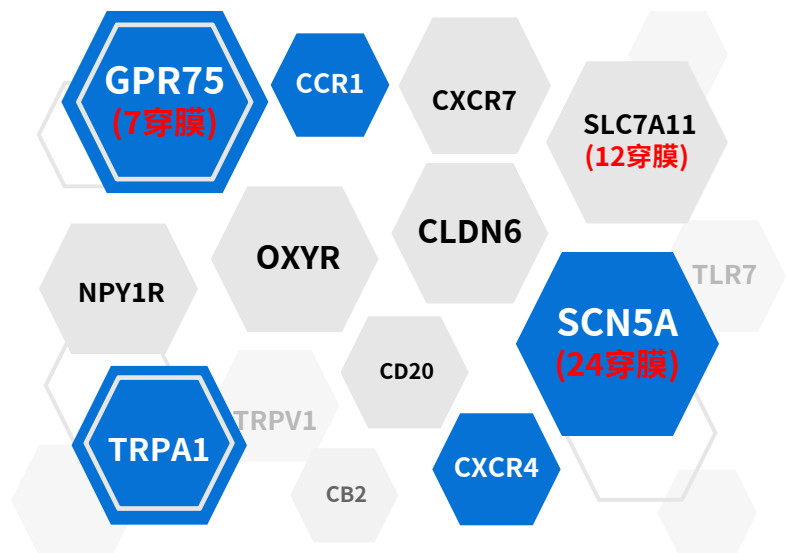
Nanodisc中文名称为纳米盘，该平台利用具有疏水和亲水双重特性的物质作为稳定剂，稳定剂朝向内部脂层的疏水面可将膜蛋白整合到Nanodisc中，维持膜蛋白的天然空间构象和活性。同时，朝外的亲水面使得Nanodisc在水溶液中具有很高的溶解度和稳定性。

与市面上大多数MSP Nanodisc不同，缔码生物研发的Synthetic Nanodisc能直接从完整的细胞中制作。在这个过程中，使用的合成高分子具有双重功能。首先，它溶解细胞膜，类似于洗涤剂，同时利用天然细胞磷脂在膜蛋白周围形成纳米盘结构。

### 流程图



### 现货500+靶标



#### 优势

- 最多现货：**500+**种全长多跨膜蛋白，包括GPCR、离子通道等，全球领先
- 最大穿膜次数：成功制备**24次**跨膜全长膜蛋白，突破行业极限
- 全面验证：高纯度、高溶解度、高稳定性，保持天然构象，支持室温运输
- 灵活定制：提供个性化蛋白表达服务，满足各种研究需求



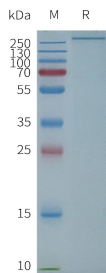
#### 应用

- ELISA
- SPR亲和力分析
- 噬菌体展示筛选实验
- 免疫
- Cryo-EM膜蛋白结构分析
- 常规蛋白生化分析



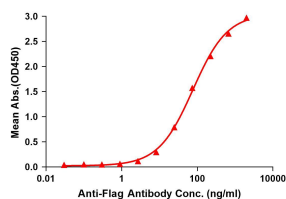
## 案例一

### SCN5A -synthetic nanodisc (24次穿膜蛋白)



Human SCN5A-Nanodisc, Flag Tag on SDS-PAGE

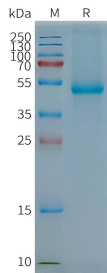
ELISA assay to evaluate SCN5A-Nanodisc  
0.2µg Human SCN5A-Nanodisc per well



SCN5A-Nanodisc (Cat.NO.FLP100726) can bind anti-Flag monoclonal antibody and the EC50 is 76.50ng/ml.

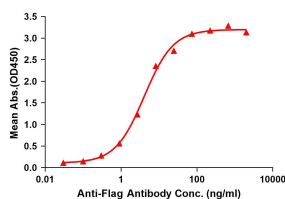
## 案例二

### SLC7A11-synthetic nanodisc (12次穿膜蛋白)



Human SLC7A11-Nanodisc, Flag Tag on SDS-PAGE

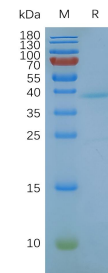
ELISA assay to evaluate SLC7A11-Nanodisc  
0.2µg Human SLC7A11-Nanodisc per well



SLC7A11-Nanodisc (Cat.NO.FLP100048) can bind anti-Flag monoclonal antibody and the EC50 is 4.101ng/ml.

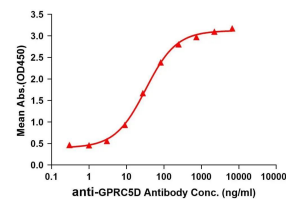
## 案例三

### GPRC5D -synthetic nanodisc (7次穿膜蛋白)



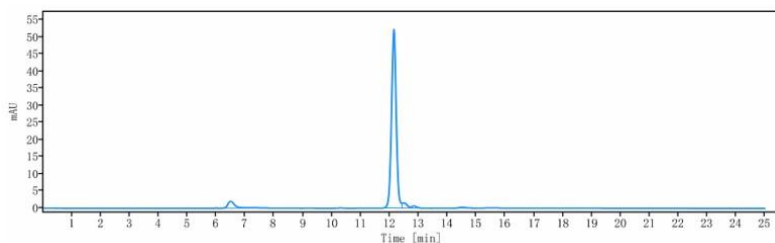
Human GPRC5D-Nanodisc, Flag Tag on SDS-PAGE

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



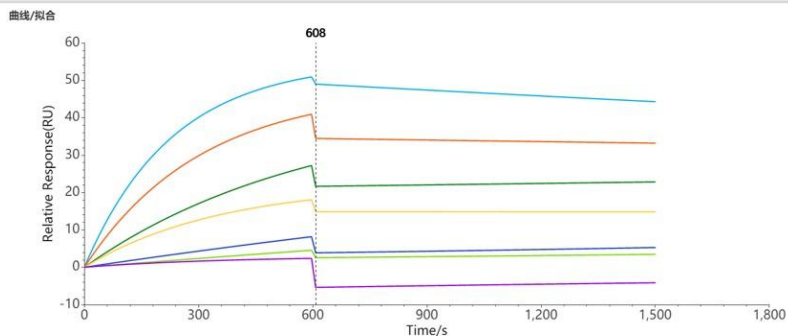
GPRC5D-Nanodisc (Cat.NO.FLP100011) can bind anti-GPRC5D monoclonal antibody(DME100090) and the EC50 is 32.86ng/ml.

## SEC-HPLC纯度检测



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

## SPR亲和力检测



Human CCR8-Nanodisc can bind Anti-CCR8 antibody (BME100115) with an affinity constant of 1.408 nM as determined in a SPR assay.

