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## 产品使用说明书 Product Instruction Manual

多宁/DuoNing

动物细胞高性能培养基 High-Performance Culture Medium for Animal-Cells

V135&136-01

【产品名称 Product name】DN feed 2 培养基 & DN feed B2 培养基 DN feed 2 medium & DN feed B2 medium

【货号 Art. No.】DN feed 2 培养基 DN feed 2 medium: FP002-100g、FP002-1kg、FP002-5kg、FP002-100g-02、FP002-1kg-02、FP002-5kg-02、FP002-10kg-02、FP002-25kg-02

DN feed B2 培养基 DN feed B2 medium: FP003-100g、FP003-1kg、FP003-100g-02、FP003-1kg-02、FP003-5kg-02、FP003-10kg-02、FP003-25kg-02

粉末包装 Powder packaging

### 【产品说明 Product description】

DN feed 2 是一款无动物来源成分、无蛋白的化学成分限定 (CD) 的高效补料培养基, 适用于采用中国仓鼠卵巢细胞 (CHO) 进行治疗性蛋白产品研发和生产过程中的补料分批 (fed-batch) 培养。本产品不含有生长因子、次黄嘌呤、胸腺嘧啶和 L-谷氨酰胺。适合采用 GS 系统和 dhfr 筛选系统的 CHO-K1、CHO-S、DG44、CHOZN 等不同细胞株的培养。

DN feed 2 is a chemical defined (CD) highly efficient feed medium with no animal derived components, no protein, which is suitable for use in fed-batch cultures using Chinese hamster ovary cells (CHO) in the development and production of therapeutic protein products. This product does not contain growth factors, hypoxanthine, thymidine or L-glutamine. It is suitable for the culture of different cell lines such as CHO-K1, CHO-S, DG44, CHOZN using GS system and dhfr screening system.


DN feed 2 需和 DN feed B2 配合使用, 同时补加。

DN feed 2 should be used together with DN feed B2 and added at the same time.

### 【使用指南 User guide】

DN feed 2 是为提高 CHO 细胞生长和生产性能专门设计的一种高效补料配方, 其含有丰富的氨基酸和维生素等营养物质, 可以满足细胞高密度培养和产物高表达时的营养需求。结合细胞株特性, 采用合理的补料策略可以明显改善细胞的生长和抗体的表达产量。

DN feed 2 is a highly efficient supplementation formula designed to improve the growth and production performance of CHO cells. It is rich in amino acids and vitamins to meet the nutritional requirements of high-density cell culture and

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high product expression. Combined with the cell line characteristics, a reasonable supplementation strategy can significantly improve the cell growth and antibody expression performance.

- ① DN feed 2 培养基: pH 为中性, 粉末包装不含葡萄糖, 液体包装含葡萄糖 75g/L;  
DN feed B2 培养基: pH 为碱性, 无葡萄糖。  
DN feed 2 medium: pH neutral, powder package without glucose, liquid package with glucose 75g/L;  
DN feed B2 medium: pH alkaline, no glucose.

② 第一次补料建议在细胞指数生长期中后期, 通常在第 3 天细胞密度达至  $2.0\sim 3.0\times 10^6$  cells/mL 以上, 开始补料, 推荐的补料方案如下, 客户可根据使用的细胞株自定义调整优化比例:

The first replenishment is recommended in the middle to late stage of cell index growth, usually on day 3 when the cell density reaches  $2.0\sim 3.0\times 10^6$  cells/mL or more, and the recommended feeding scheme is as follows, and the optimized ratio can be customized according to the cell line used:

补料时间 Feeding time	DN feed 2+DN feed B2
Day 3	3%+0.3%
Day 5	3%+0.3%
Day 7	3%+0.3%
Day 9	3%+0.3%
Day 11	3%+0.3%

注意事项 Notes:

- 培养 GS 筛选系统工程细胞株时, 根据需要添加次黄嘌呤和胸腺嘧啶。  
Add hypoxanthine and thymine as needed when culturing GS screening system engineering cell lines.
- 培养 dhfr 筛选系统工程细胞株时, 根据需要添加 3~8mM L-谷氨酰胺。  
When cultivating dhfr screening system engineering cell lines, add 3-8mM L-glutamine as needed.

### 【配制指南 Preparation guide】

适用于 DN feed 2 粉末包装 (以 1L 为例), 根据实际工艺选择添加葡萄糖的含量。


Suitable for DN feed 2 powder packaging (taking 1L as an example), choose the amount of glucose added according to the actual process.

1. 准备配液体积 80%的超纯水 (20~30°C);  
Prepare 80% volume ultrapure water (20~30°C);
2. 加入 15mL 6M NaOH 溶液;  
Add 15mL of 6M NaOH solution;
3. 缓慢加入 DN feed 2 粉末 101.62g, 搅拌 30 min, 溶解完全;  
Slowly add 101.62 g of DN feed 2 powder, stir for 30 min and dissolve completely;
4. 调节 pH 至 6.80±0.10;  
Adjusting the pH to 6.80 ± 0.10;
5. 定容, 搅拌 5~10 min;  
Constant volume, stirring for 5 ~ 10 min;
6. 用 0.22µm 过滤器除菌过滤;  
Sterilization and filtration by 0.22µm filter;
7. DN feed 2 液体培养基 (添加 75g/L 葡萄糖) 渗透压正常范围为 1400~1700 mOsm/kg。  
The normal range of osmotic pressure for DN feed 2 liquid medium (with 75g/L glucose added) is 1400~1700 mOsm/kg.

适用于 DN feed B2 粉末包装 (以 1L 为例)

Suitable for DN feed B2 powder packaging (taking 1L as the example)

1. 准备配液体积 60%的超纯水 (20~30°C);  
Prepare 60% volume ultrapure water (20~30°C);
2. 加入 200mL 6M NaOH 溶液;  
Add 200mL 6M NaOH solution;
3. 加入 DN feed B2 粉末 100.70g, 搅拌 30 min, 溶解完全;  
Add 100.70 g of DN feed B2 powder, stir for 30 min and dissolve completely;
4. 调节 pH 至 10.80~11.80;  
Adjust pH to 10.80~11.80;
5. 定容, 搅拌 5~10 min;  
Constant volume, stirring for 5 ~ 10 min;
6. 用 0.22µm 过滤器除菌过滤;  
Sterilization and filtration by 0.22µm filter;

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**【储存、有效期或复验期 Storage condition, validity period or retest date】**

上海生产基地, DN feed 2 粉末包装: 2~8°C 避光储存, 有效期为 24 个月。

Shanghai production base, DN feed 2 powder packaging: 2°C to 8°C, protect from light; validity period: 24 months.

无锡生产基地, DN feed 2 粉末包装: 2~8°C 避光储存, 复验期为 24 个月。

Wuxi production base, DN feed 2 powder packaging: 2°C to 8°C, protect from light; retest date: 24 months.

上海生产基地, DN feed B2 粉末包装: 2~8°C 避光储存, 有效期为 24 个月。

Shanghai production base, DN feed B2 powder packaging: 2°C to 8°C, protect from light; validity period: 24 months.

无锡生产基地, DN feed B2 粉末包装: 2~8°C 避光储存, 复验期为 24 个月。

Wuxi production base, DN feed B2 powder packaging: 2°C to 8°C, Protect from light; retest date: 24 months.

**【生产企业信息 Manufacturer information】**

名称 Name: 上海多宁生物科技股份有限公司 Shanghai Duoning Biotechnology Co., Ltd.

地址 Address: 上海市松江区民强路 1525 弄 30 幢 Building 30, Lane 1525, Minqiang Road, Songjiang District, Shanghai

电话 Tel: 021-64340155

网址 Website: [www.duoningbio.com](http://www.duoningbio.com)

名称 Name: 无锡多宁生物科技有限公司 Wuxi Duoning Biotechnology co.,Ltd

地址 Address: 无锡新加坡工业园新集路 2-1、2-2 号厂房 No.2-1, No.2-2, Xinji Road, Singapore Industrial Park, Wuxi

电话 Tel: 0510-85956600

网址 Website: [www.duoningbio.com](http://www.duoningbio.com)