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## 产品使用说明书 Product Use Instructions

多宁/DuoNING

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

V118&119-01

### 【产品名称 Product name】 【货号 Art. No.】

Product name: DN feed 1

Art. No.: CDFP1-001、CDFP1-010、CDFP1-050、CDFP1-100、CDFP1-100g-02、CDFP1-1kg-02、CDFP1-5kg-02、CDFP1-10kg-02、CDFP1-25kg-02

Product name: DN feed B

Art. No.: CDBP1-001、CDBP1-010、CDBP1-050、CDBP1-100、CDBP1-100g-02、CDBP1-1kg-02、CDBP1-5kg-02、CDBP1-10kg-02、CDBP1-25kg-02

粉末包装 Powder packaging

### 【产品说明 Product description】

DN feed 1 是一种无动物来源成分、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 1 is an animal-derived, protein-free, chemically defined (CD) high-efficiency feeding medium suitable for feeding Chinese hamster ovary cells (CHO) in the development and production of therapeutic protein products fed-batch cultivation. This product does not contain growth factors, hypoxanthine, thymine and L-glutamine. It is suitable for the cultivation of different cell lines such as CHO-K1, CHO-S, DG44 and CHOZN using GS system and dhfr screening system.


DN feed 1 使用时需和 DN feed B 液配合使用, 同时补加。

When DN feed 1 is used, it needs to be used together with DN feed B and added at the same time.

### 【使用指南 User guide】

DN feed 1 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性能。

DN feed 1 is a high-efficiency feeding formula specially designed to improve the growth and production performance of CHO cells. It is rich in nutrients such as amino acids and vitamins, which can meet the nutritional needs of high-density

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cell culture and high product expression. Users need to consider the characteristics of the cell line, and a reasonable feeding strategy can significantly improve the cell growth and antibody expression performance.

DN feed 1 液体培养基: pH 为中性, 含葡萄糖 37.5g/L; DN feed B 液体培养基: pH 为碱性, 无葡萄糖。

DN feed 1 liquid medium: pH is neutral, containing glucose 37.5g/L; DN feed B liquid medium: pH is alkaline, without glucose.

### 【配制指南 Preparation guide】

适用于 DN feed 1 粉末包装 (以 1L 为例)


Suitable for DN feed 1 powder packaging (take 1L as an example)

1. 准备配液体积 80% 的超纯水;
1. Prepare ultrapure water with 80% of the volume of the solution;
2. 加入 DN feed 1 粉末 116.02g, 搅拌 20 min, 溶液轻微浑浊;
2. Add 116.02g of DN feed 1 powder and stir for 20 min, the solution is slightly turbid;
3. 加入 6M 的 NaOH 溶液 10mL, 搅拌 10min, 溶液澄清;
3. Add 10 mL of 6M NaOH solution and stir for 10 min, the solution is clear;
4. 加入 1.8g P188, 继续搅拌 10 min;
4. Add 1.8g P188 and continue stirring for 10 min;
5. 调节 pH 至 6.90~7.10;
5. Adjust pH to 6.90~7.10;
6. 定容, 搅拌 5~10 min;
6. Constant volume, stirring for 5~10 min;
7. 用 0.22 $\mu$ m 过滤器除菌过滤。
7. Sterilize with a 0.22 $\mu$ m filter.

适用于 DN feed B 粉末包装 (以 1L 为例)

Suitable for DN feed B powder packaging (take 1L as an example)

1. 准备配液体积 60% 的超纯水 (20~30 $^{\circ}$ C);
1. Prepare ultrapure water (20~30 $^{\circ}$ C) with 60% volume of solution;
2. 加入 240mL 6N NaOH 溶液;
2. Add 240mL 6N NaOH solution;
3. 加入 DN feed B 粉末 125.0g, 搅拌 20 min, 溶解完全;

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3. Add 125.0 g of DN feed B powder, stir for 20 min, and dissolve completely;

4. 定容，搅拌 5~10 min;

4. Constant volume, stirring for 5~10 min;

5. 用 0.22μm 过滤器除菌过滤。

5. Sterilize with a 0.22μm filter.

### 【细胞培养 Cell culture】

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，根据使用细胞株可以自定义调整优化比例：

The first feeding time is recommended to be in the middle and late stages of the exponential growth phase of the cells, usually when the cell density reaches  $2.0\sim 3.0\times 10^6$  cells/mL or more on the 3rd day, to start feeding. The recommended feeding scheme is as follows. Customers can customize and adjust the optimized ratio according to the cell line used:

补料时间 Feeding time	DN feed 1+DN feed B
Day 3	4%+0.2%
Day 5	4%+0.2%
Day 7	6%+0.3%
Day 9	6%+0.3%
Day 11	4%+0.2%
Day 13	4%+0.2%

### 【细胞驯化 Cell domestication】

N/A

### 【细胞冻存 Cell cryopreservation】

N/A

### 【细胞复苏 Cell resuscitation】


N/A

### 【细胞传代 Cell passage】

N/A

### 【储存和有效期 Storage and validity period】

DN feed 1 粉末包装：2~8°C 避光储存，有效期为 24 个月；

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DN feed 1 powder packaging: 2~8°C dark storage, valid for 24 months;

DN feed B 粉末包装: 2~8°C 避光储存, 有效期为 24 个月。

DN feed B powder packaging: Store at 2~8° C away from light, valid for 24 months.

### 生产企业信息 Manufacturer information

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