



## 产品使用说明书 Product Manual

# 拟南芥种子萌发培养基

|                                                     |                                         |
|-----------------------------------------------------|-----------------------------------------|
| 品牌                                                  | Chinook 钦诺克                             |
| 货号                                                  | CN263631                                |
| 中文名称                                                | 拟南芥种子萌发培养基                              |
| 英文名称                                                | Arabidopsis Germination Medium          |
| 产品别名                                                | Arabidopsis Germination Medium、拟南芥生芽培养基 |
| 用途                                                  | 用于拟南芥生芽组织培养                             |
| 成分（mg/L）：                                           |                                         |
| 硝酸铵 Ammonium Nitrate                                | 825.0                                   |
| 硝酸钾 Potassium Nitrate                               | 950.0                                   |
| 硼酸 Boric Acid                                       | 3.1                                     |
| 六水氯化钴 Cobalt Chloride•6H <sub>2</sub> O             | 0.0125                                  |
| 五水硫酸铜 Cupric Sulfate•5H <sub>2</sub> O              | 0.0125                                  |
| 乙二胺四乙酸二钠二水合物 Na <sub>2</sub> EDTA•2H <sub>2</sub> O | 18.63                                   |
| 七水硫酸亚铁 Ferrous Sulfate•7H <sub>2</sub> O            | 13.9                                    |
| 无水硫酸镁 Magnesium Sulfate Anhydrous                   | 90.35                                   |
| 一水硫酸锰 Manganese Sulfate•H <sub>2</sub> O            | 8.45                                    |
| 二水钼酸钠 Sodium Molybdate•2H <sub>2</sub> O            | 0.125                                   |
| 碘化钾 Potassium Iodide                                | 0.415                                   |
| 磷酸二氢钾 Potassium Phosphate Monobasic                 | 85.0                                    |
| 七水硫酸锌 Zinc Sulfate•7H <sub>2</sub> O                | 4.3                                     |
| 氯化钙 Calcium Chloride Anhydrous                      | 166.1                                   |
| 2-(N-吗啡啉) 乙磺酸 MES                                   | 500.0                                   |
| 蔗糖 Sucrose                                          | 10000.0                                 |
| pH                                                  | 3.5-4.5（25℃）                            |
| 用法：                                                 |                                         |
| 称取本品12.67（精确值12.665395g），加入1000mL蒸馏水中溶解，根据实验需求调节pH， |                                         |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 分装，121℃高压灭菌15分钟。                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>储存方式：</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 常温运输，2-8℃密封储存；保质期3年。                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>注意事项：</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>1. 本品pH3.5-4.5，可根据实验需求使用盐酸和氢氧化钠调节pH，拟南芥种子萌发和生芽组织培养的培养基pH值一般为5.7-5.8（25℃）。灭菌后若需微调，需使用无菌的盐酸溶液和氢氧化钠溶液进行调节。</p> <p>2. 添加植物激素，耐高温的植物激素如IBA、NAA、6-BA和2,4-D，可提前加入一起高压灭菌；对于其他不耐高温的植物激素，一般需先单独溶解成高倍母液并过滤除菌，待培养基冷却至65℃左右时加入。</p> <p>3. 该产品不适宜制备高浓度母液，会有沉淀产生。</p> <p>4. 称量时注意粉尘，佩戴口罩操作以避免引起呼吸道系统不适。</p> <p>5. 干粉培养基使用后立即旋紧瓶盖，避免吸潮结块。贮存于避光、干燥处。未开封产品保质期三年。开封后根据存放条件的不同，保质时间存在一定的差异。</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>配方出处：</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>Denness L, McKenna JF, Segonzac C, Wormit A, Madhou P, Bennett M, Mansfield J, Zipfel C, and Hamann T.<br/>(2011) Cell Wall Damage-Induced Lignin Biosynthesis Is Regulated by a Reactive Oxygen Species- and Jasmonic Acid-Dependent Process in Arabidopsis. Plant Physiol. Jul 2011; 156(3): 1364-1374.</p> <p>Martin T, Oswald O, and Graham IA (2002) Arabidopsis Seedling Growth, Storage Lipid Mobilization, and Photosynthetic Gene Expression Are Regulated by Carbon:Nitrogen Availability. Plant Physiol. Vol. 128 (2) pg. 472-481</p> <p>Stacey MG, Osawa H, Patel A, Gassmann W, and Stacey G (2006) Expression analyses of Arabidopsis oligopeptide transporters during seed germination, vegetative growth and reproduction. Planta Vol. 223(2) pg. 291- 305</p> <p>Sorek N, Sorek H, Kijac A, Szemenyei HJ, Bauer S, Hématy K, Wemmer DE, and Somerville CR (2014) The Arabidopsis COBRA protein facilitates cellulose crystallization at the plasma membrane. JBC First published online 20Oct2014 doi: 10.1074/jbc.M114.607192</p> <p>Valvekens D, Van Montagu M, and Van Lijsebettens M. (1988) Agrobacterium tumefaciens-</p> |



mediated

transformation of *Arabidopsis thaliana* root explants by using kanamycin selection. PNAS 85, 5536-5540

Millet YA, Danna CH, Clay NK, Songnuan W, Simon MD, Werck-Reichhart D, and Ausubel FM (2010) Innate

Immune Responses Activated in *Arabidopsis* Roots by Microbe-Associated Molecular Patterns. Plant Cell Vol. 22 pg. 973-99

### **废物处理:**

检测之后带菌物品置于121℃下高压灭菌30分钟后处理。