乳酸菌测试片

使用说明书

产品名称	产品编号	包装规格
乳酸菌测试片	HP014	20 片/包

【产品简介】

Handy plate™乳酸菌测试片为预制备的即用型培养基产品，含有标准的培养基、除氧剂、冷水凝胶和显色指示剂，接种后直接放入培养箱培养，无需单独置于无氧环境中。本产品可用于食品和饮料中乳酸菌的测定。

【使用说明】

1. 样品制备

称取样品 25 g(mL) 放入含有已灭菌的 225 mL 磷酸缓冲液（或生理盐水，注意：若用于检测双歧杆菌等对盐敏感的菌种则不可用生理盐水作为稀释液）的无菌均质杯或均质袋内，均质器混匀 1 min～2 min 制成 1:10 的样品匀液，必要时用无菌 1 mol/L NaOH 或 1mol/L HCl 溶液调节样品匀液 pH 至 6.8～7.2。用 1mL 无菌吸管或移液器吸取 1:10 均液 1 mL，注入含有 9 mL 稀释液的试管内，振摇后成为 1:100 的样品匀液，以此类推制备 10 倍系列稀释的样品匀液，每次换一支吸管。

2. 接种

根据对样品污染状况的估计，选择 2～3 个稀释度进行检测。将乳酸菌测试片置于平坦实验台面，揭开上层膜，用无菌吸管吸取 1 mL 样品匀液滴加到测试片中央，缓缓盖上上层膜，使样液扩散并重新形成凝胶，避免产生气泡。

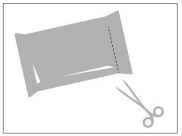
3. 培养

将测试片正面向上水平放置，36 ±1℃条件下培养 48 ±2 h，测试片堆叠最多不超过 20 片。

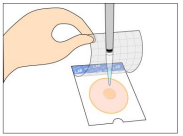
4. 判读

计数所有蓝绿色菌落。合适的计数范围在 15 CFU~150 CFU。如菌浓度过高，整个培养区域都呈淡蓝色且无法计数，需对样品进一步稀释以获得准确的计数。如需分离菌落进行进一步分析，揭开上层膜用接种针将菌落挑出即可。

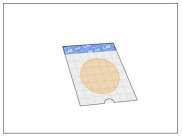
【操作图解】



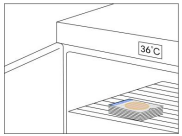
1. 用剪刀沿虚线剪开，取出测试片盒。



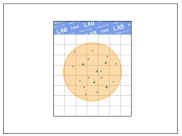
2. 将测试片放在水平台上，揭开覆膜，将 1mL 样品液滴加在测试片中。



3. 缓慢盖上覆膜，轻压一下。



4. 将测试片正面朝上，放置于恒温培养箱中，36±1℃培养 48±2 h，测试片堆叠不应超过 20 张。



5. 根据判读手册判读测试片上是否有目标菌生长，对菌落进行计数。

（扫描二维码观看操作视频）

【注意事项】

对于严格厌氧菌种（如：双歧杆菌）无需置于无氧环境培养，若置于无氧环境培养可能会影响菌落显色。

【储存条件与保质期】

2~8℃密封储存，有效期为 18 个月。

已打开包装未使用的测试片装回包装袋中，折叠后用包装袋内的不干胶贴密封，储存时间不超过 4 周为宜。

【废弃物处置】

测试片在使用之后可能包含微生物，需在 121℃ 30 min 高压蒸汽灭菌处理后严格按规定的方式处理。

环凯生物 HuanKai Biology

Bacillus Cereus Count Plate

Product No.	Type of Product	Packaging Specifications
HP014	Handy Plate®	20 plates/pack

【Usage】

Handy Plate® Lactic Acid Bacteria Test Plate are pre-prepared, ready-to-use culture media products containing standard culture media, oxygen absorber, cryogel, and colorimetric indicator. This product can be used to determine lactic acid bacteria in food and beverages.

【Instruction】

1. Sample Preparation

Place 25 g (mL) of sample into a sterile homogenizing cup or bag containing 225 mL of phosphate buffer (or physiological saline). Homogenize for 1-2 min to prepare a 1:10 sample homogenate. If necessary, adjust the pH of the homogenate to 6.8-7.2 with sterile 1 mol/L NaOH or 1 mol/L HCl solution. Using a 1 mL sterile pipette or pipette, draw 1 mL of the 1:10 homogenate and inject it into a test tube containing 9 mL of diluent. Shake to obtain a 1:100 sample homogenate. Prepare 10-fold serial dilutions of the sample homogenate, using a different pipette each time.

2. Inoculation

Based on the estimated contamination level of the sample, select 2-3 dilutions for testing. Place the E. coli/Lactobacillus test strip on a flat work surface, peel off the top membrane, and use a sterile pipette to drop 1 mL of the sample homogenate onto the center of the test strip. Slowly cover with the top membrane to allow the sample solution to diffuse and reform into a gel, avoiding the formation of air bubbles.

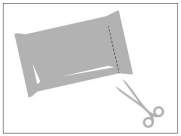
3. Incubation

Place the count plates in a horizontal position with the front side facing up. Stack no more than 20 plates and incubate at 36 ± 1℃ for 48 ± 2 h hours.

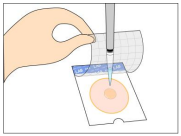
4. Interpretation

Count all blue-green colonies. The appropriate counting range is 15 CFU~150 CFU. If the bacterial concentration is too high, the entire incubation area will appear pale blue and cannot be counted; further dilution of the sample is necessary to obtain accurate counts. If colonies need to be isolated for further analysis, peel off the upper membrane and pick out the colonies with an inoculation needle.

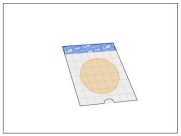
【Process Diagram】



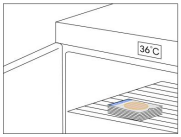
1. Cut along the dotted line with scissors and remove the count plate.



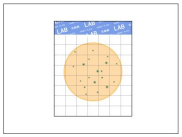
2. Place the count plate on a horizontal platform, peel off the protective film, and add 1 mL of sample solution to the count plate.



3. Slowly cover with the film and press lightly.



4. Place the count plates with the frontside facing up in a constant temperature incubator. Incubate at 36±1℃for 48±2 hours. The number of stacked plates should not exceed 20.



5. Determine whether the target organism has grown on the count plate according to the interpretation manual, and count the colonies accordingly.

Note: Scan the QR code on the left to watch the operation video.

【Precautions】

Strictly anaerobic strains (e.g., Bifidobacterium) do not require anaerobic culture conditions, as exposure to such environments may affect colony chromogenesis.

【Storage and Shelf Life】

Store sealed at 2~8℃, valid for 18 months.

Put the unused count plate back into the packaging bag, fold it and seal it with a self-adhesive sticker. The storage time should not exceed 4 weeks.

【Waste Disposal】

The count plate may contain microorganisms after use and must be sterilized by high pressure steam at 121℃ for 30min and then handled in strict accordance with regulations.