

ProbeMaster® Lyo GEL, 5×

<http://cn.lumiprobe.com/p/probemaster-lyo-gel>

ProbeMaster® GEL is a ready-to-use lyophilized reaction mixture containing all the necessary components for PCR with subsequent detection of results by electrophoresis. To reconstitute the mixture into a liquid form, simply add the specified amount of water. The composition of the mixture is optimized to achieve ideal results in terms of processivity and specificity of amplification. Due to the high density of the mixture and the presence of dyes (bromophenol blue and xylene cyanol), the sample does not require mixing with loading buffer before being loaded onto the gel. The presence of two dyes allows precise control of electrophoresis time.

The ProbeMaster® Lyo GEL reaction mixture is suitable for DNA amplification followed by electrophoretic detection of the results and can be used for routine cloning and other applications requiring further use of the PCR product after amplification (the mixture does not contain UDG/dUTP).

Due to the presence of visible dyes, ProbeMaster® GEL is not suitable for real-time PCR. If needed, you can order the [ProbeMaster® Lyo UNI](#) real-time PCR reaction mixture.

Reaction mixture composition

- HS Taq DNA polymerase;
- PCR buffer (contains 3 mM Mg²⁺ in 1× reaction mixture);
- Deoxynucleoside triphosphate mixture;
- Gel loading dyes;
- Cryoprotectants

Key characteristics

- One tube of lyophilized mixture, after dilution in 450 µL of water, is sufficient for 100 reactions of 25 µL each.
- The mixture is completely ready for use. To set up a reaction, only the DNA sample, primers, and water need to be added to the mixture, significantly saving reaction time. The ready-to-use reaction mixture reduces the risk of sample contamination.
- Suitable for PCR fragments up to 3,000 bp in length, with no more than 70% GC, and not requiring high-precision amplification.
- Genomic, viral, plasmid DNA, and other materials can be used as templates.
- Contains highly processive Hot-Start Taq polymerase with activation at 95 °C for 10 min. The HS Taq DNA polymerase used is a complex of monoclonal antibodies with the enzyme. Heating the sample in the first PCR cycle inactivates the antibodies in the complex and activates the enzyme. "Hot-Start" technology prevents non-specific amplification and the formation of primer dimers.
- HS Taq DNA polymerase has 5'-3' polymerase and 5'-3' exonuclease activity; it also has transferase activity: it adds an additional adenine residue to the 3' ends of double-stranded DNA, allowing the PCR products to be used for TA cloning.
- The composition and density of the mixture are optimized for direct sample loading onto an agarose gel after amplification is complete.
- Samples are easily loaded onto an agarose gel due to the dyes included in the mixture. The presence of two dyes (Bromophenol Blue and Xylene Cyanol) allows precise control of electrophoresis time.

Applications

Standard PCR, RT-PCR, genotyping, PCR for colony testing, obtaining a product for TA cloning, etc.

Equipment compatibility:

Compatible with any thermocycler.

PCR reaction mixture selection table

Name	Reaction mixtures for quantitative PCR (RT-PCR)				Application
	dsGreen	Eva488	ROX	UDG, dUTP	
ProbeMaster[®] Lyo UDG Cat.# •0514	—	—	—	✓	
ProbeMaster[®] Lyo ROX Cat.# •0114	—	—	✓	—	
ProbeMaster[®] Lyo Eva488 Cat.# •0614	—	✓	—	—	qPCR with DNA probes or intercalating dye
ProbeMaster[®] Lyo Eva488 ROXCat.# •0714	—	✓	✓	—	
ProbeMaster[®] Lyo dsGreen Cat.# •0814	✓	—	—	—	
Reaction mixture for standard PCR					
ProbeMaster[®] Lyo GEL Cat.# •0024	—	—	—	—	PCR followed by gel electrophoresis analysis, contains dye for application to gel
ProbeMaster[®] Lyo GEL UDGCat.# •0524	—	—	—	✓	
Universal reaction mixture					
ProbeMaster[®] Lyo UNI Cat.# •0534	—	—	—	—	qPCR with DNA probes/intercalating dye or standard PCR followed by gel electrophoresis analysis

外观

溶解度

质量控制

储存: 4°C 下 12 个月 (自交付之日起)。

运输: 在 25°C 温度下最多 21 天。

重新配制为液体形式后, 可在 4°C 下储存最多 30 天, 或在有效期内冷冻并储存在 -20°C 下。重构的混合物最多可经历五次冻融循环。

件

本产品仅供研究目的提供和销售。本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试, 且未经明示或暗示授权用于其他任何用途, 包括但不限于体外诊断、人类或动物用途, 以及商业用途。

声明

ProbeMaster[®] 是 Lumiprobe 的注册商标。