

ProbeMaster® Lyo dsGreen, 5x

<http://de.lumiprobe.com/p/probemaster-lyo-dsgreen>

ProbeMaster® Lyo dsGreen is a lyophilized master mix containing all the necessary components for performing the Polymerase Chain Reaction (PCR), as well as the intercalating dye [dsGreen](#). The composition of the mix has been optimized to achieve ideal amplification processivity and specificity. To reconstitute the mix into liquid form, simply add the specified volume of water.

The ProbeMaster® Lyo dsGreen mix is suitable for both real-time PCR using the intercalating dye dsGreen and for DNA amplification followed by result detection via electrophoresis. Because the mix lacks UDG/dUTP, it can be used for routine cloning tasks and other applications that require subsequent use of the PCR product.

Master Mix Composition

- HS Taq DNA Polymerase;
- Deoxynucleoside triphosphate (dNTP) mix;
- PCR buffer (containing Mg^{2+});
- dsGreen intercalating dye;
- Cryoprotectants

Key Features

- One tube of the lyophilized mix, once reconstituted with 450 μ L of water, is sufficient for performing 100 reactions with a volume of 25 μ L each.
- The mix is completely ready for use, which reduces the risk of sample contamination and significantly saves time during reaction setup. To set up a reaction, one needs only to add the DNA template, primers, and water to the mix.
- Suitable for PCR amplification of fragments up to 3,000 base pairs (bp) in length, with a GC content not exceeding 70%, and for applications that do not require high-fidelity amplification.
- Genomic, viral, plasmid DNA, and other types of DNA can be used as templates.
- The reaction mix contains Taq polymerase featuring «hot start» technology. The HS Taq DNA polymerase utilized in this product consists of a complex formed between monoclonal antibodies and the enzyme. Heating the sample during the initial PCR cycle inactivates the antibodies within the complex, thereby activating the enzyme. This "Hot-Start" technology effectively prevents nonspecific amplification and primer dimer formation.
- The included HS Taq DNA polymerase exhibits 5'→3' polymerase, 5'→3' exonuclease, and adenyltransferase activities, making the resulting PCR products suitable for TA cloning.
- The mixture contains dsGreen, an intercalating dye highly sensitive to the presence of double-stranded DNA, which enables «real-time» PCR (quantitative PCR) without the need for added fluorescent probes.
- Contains no UDG or dUTP.

Applications

Real-time PCR, PCR with electrophoretic detection, PCR using cDNA templates generated via reverse transcription, genotyping, colony PCR, generation of products for TA cloning, and others.

Equipment Compatibility

Compatible with all types of thermal cyclers.

PCR reaction mixture selection table

| Name | Reaction mixtures for quantitative PCR (RT-PCR) | | | | Application |
|---|---|--------|-----|-----------|---|
| | dsGreen | Eva488 | ROX | UDG, dUTP | |
| ProbeMaster[®] Lyo UDG Cat.# •0514 | — | — | — | ✓ | qPCR with DNA probes or intercalating dye |
| ProbeMaster[®] Lyo ROX Cat.# •0114 | — | — | ✓ | — | |
| ProbeMaster[®] Lyo Eva488 Cat.# •0614 | — | ✓ | — | — | |
| 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 |

Allgemeine Eigenschaften

Löslichkeit: Wasser

Qualitätskontrolle:

Lagerungsbedingungen:

Rechtliche Hinweise: Dieses Produkt wird nur für Forschungszwecke angeboten und verkauft. Es wurde nicht auf Sicherheit und Wirksamkeit in Nahrungsmitteln, pharmazeutischen Produkten, medizinischen Vorrichtungen, Kosmetika sowie für gewerbliche oder andere Einsatzzwecke getestet. Der Verkauf gewährt oder impliziert nicht die Erlaubnis zur Verwendung in der In-vitro-Diagnostik, bei der Herstellung von Nahrungsmitteln oder pharmazeutischen Produkten, in medizinischen Vorrichtungen sowie in kosmetischen Erzeugnissen.