

ProbeMaster® Lyo UDG, 5x

<http://www.lumiprobe.com/p/probemaster-mix-udg-lyo>

ProbeMaster® Lyo UDG is a lyophilized reaction mixture containing all the necessary components for PCR. To reconstitute the mixture into a liquid form, simply add the specified amount of water. The composition of the mixture includes Hot-start polymerase and is optimized to achieve optimal amplification processivity and specificity. Uracil-DNA glycosylase eliminates contamination from amplicons generated in prior reactions, preventing false-positive results.

The ProbeMaster® Lyo UDG mixture is suitable for both quantitative PCR and DNA amplification followed by electrophoresis detection. For qPCR reactions, fluorescence detection should use a DNA probe labeled with a fluorophore and quencher (hydrolyzable probes, molecular "beacons", "scorpion" primers) or two probes labeled with fluorophores that form a FRET pair. In addition to DNA probes, the intercalating dye [dsGreen](#) can be used for fluorescence detection.

One tube of lyophilized mixture, after dilution in 450 µL of water, is sufficient for 100 reactions of 25 µL each.

Reaction mixture composition

- HS Taq DNA polymerase;
- Uracil-DNA glycosylase (UDG);
- Deoxynucleoside triphosphate mixture (including dUTP);
- PCR buffer (contains Mg²⁺ at a concentration of 3 mM in 1x reaction mixture);
- Cryoprotectants

Applications

Qualitative and quantitative PCR with detection of amplification products both in real-time and using gel electrophoresis; reverse transcription PCR.

For cloning and other applications requiring further work with the PCR product after amplification, we recommend using our [ProbeMaster® Lyo UNI](#) product, which does not contain dUTP.

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

General properties

Appearance: white tablet

Solubility: water

Quality control: functional test

Storage conditions: Storage: 12 months (from the date of delivery) at 4 °C.

Transportation: Up to 21 days at temperatures up to 25 °C.

After reconstitution into liquid form, store at 4 °C for up to 30 days or freeze and store at –20 °C within the shelf life. The reconstituted mixture may undergo up to five freeze-thaw cycles.

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