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ProbeMaster® Lyo Eva488 ROX, 5×

http://www.lumiprobe.com/p/probemaster-mix-eva488-rox-lyo

ProbeMaster® Lyo Eva488 ROX is a lyophilized master mix containing all necessary components for polymerase chain reaction (PCR), intercalating dye Eva488, and the reference dye ROX. The composition of the mixture is optimized to obtain ideal results in terms of processivity and specificity of amplification. To reconstitute the mixture into a liquid form, add the specified amount of water.

The ProbeMaster® Lyo Eva488 ROX master mix is suitable for real-time PCR due to the intercalating dye Eva488. It allows accurate determination of the DNA matrix content in the sample due to the normalizing dye ROX in its composition. The mixture can also be used for DNA amplification with subsequent electrophoresis detection.

Master mix composition

- HS Taq DNA polymerase;
- Deoxynucleoside triphosphates;
- PCR buffer (contains $Mg^{2+);}$
- Eva488 intercalating dye;
- ROX reference dye;
- Cryoprotectants

Key characteristics

- One tube of the lyophilized mixture after dilution in 450 µL of water is enough for 100 reactions with a volume of 25 µL.
- The mixture is completely ready for use. Only the DNA sample, primers, and water must be added to the mixture to perform the reaction. It saves considerable time for reaction. The ready-to-use format of the master mix reduces the risk of sample contamination.
- Genomic, viral, plasmid DNA, cDNA after reverse transcription, etc., can be used as a matrix.
- Contains high-processive Hot-Start Taq polymerase with activation for 5 min at 95 °C. The HS Taq DNA polymerase is an enzyme complex with a monoclonal antibody. Heating the sample in the first PCR cycle inactivates the antibodies in the complex and activates the enzyme. The "Hot-Start" technology prevents nonspecific amplification and primer dimer formation.
- HS Taq DNA polymerase has 5′-3′ polymerase and 5′-3′ exonuclease activity; it also has transferase activity: it attaches an additional adenine residue to the 3′ ends of double-stranded DNA, allowing PCR products to be used for TA cloning.
- The master mix contains the intercalating dye Eva488. Eva488 is a dimeric acridine that brightly fluoresces upon binding to double-stranded DNA and does not inhibit the reaction. The fluorescence of Eva488 dye is detected by the FAM channel.
- For signal normalization, the reference dye ROX is included in the master mix. The concentration of ROX has been specifically optimized to work on most real-time amplifiers available on the market.
- Does not contain UDG and dUTP.

Applications

Real-time PCR, PCR with electrophoresis detection, PCR with cDNA samples after reverse transcription, genotyping, PCR for colony verification.

Equipment compatibility

Compatible with all types of amplifiers.

PCR reaction mixture selection table

Name	dsGreen	Eva488	ROX	UDG, dUTP	Application
Reaction mixtures for quantitative PCR (RT-PCR)					
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

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General properties

Appearance:	pink colored 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 a temperature of 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 expiration date. The reconstituted mixture may undergo up to five freeze–thaw cycles.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.