Hot Start PCR Ready Mix, Monoclonal Antibody Based

CAT. NO. DP-016-0250, 250 rxns
DP-016-1000, 1000 rxns

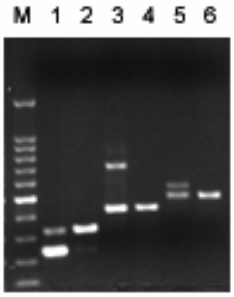
APPLICATION

- built-in hot start PCR amplification;
- for amplification of genomic DNA sequences with high fidelity, specificity, sensitivity, and yield;
- for manual or automated PCR reaction setup at room temperature;
- designed for high through-put genotyping and screening.

DESCRIPTION

Hot Start PCR Ready Mix is a 2x concentrated reagent mix, monoclonal antibody-based, optimized for built-in hot start PCR amplification. It contains EU-Taq DNA polymerase mix, 2x PCR-buffer, dNTP and stabilizers. EU-Taq polymerase mix is a special thermostable DNA polymerase complexed with a proprietary Taq monoclonal antibody, which blocks polymerase activity prior to the onset of thermal cycling. This prevents primer-dimers and other artifacts resulting from low-level synthesis from nonspecifically primed sites. The antibodies are quickly inactivated by the increased temperature of thermal cycling. The monoclonal antibody based Hot Start PCR Ready Mix requires no prolonged heating or denaturing step as do other hot-start methods.

The Hot Start PCR Ready Mix has been well designed for amplification of genomic DNA sequences, particularly for genotyping with multiple primer sets.



Genotyping of transgenic mice. Lane M, 100-bp marker; lane 1, SOD knock-in mice; lane 2, wt; lane 3, Rag-1 heterozygote; lane 4, wt; lane 5, PML heterozygote; lane 6, wt. PCR condition: 94 ^{o}C x 2'; 94 ^{o}C x 30", 55 ^{o}C x 30", 72 ^{o}C x 30", for 30 cycles.

STORAGE TEMPERATURE

Recommended to keep at 2-8°C for immediate use (6 month) and -20°C for long term storage.

COMPOSITION

100 units EU-Taq polymerase, 100 mM Tris-HCl pH 8.75 (at 25°C), 50 mM $(NH4)_2SO4$, 5 mM MgCl2, 0.5% Trinton X-100, 40 µM of each dNTP, Taq monoclonal antibody, and stabilizers.

COMPONENT

Cat# DP-016-0250, 250 rxns:

2x HotStart PCR ready mix	2 x 1.25 ml
ddH_2O	2 x 1.5 ml

Cat# DP-016-1000, 1000 rxns:

2x HotStart PCR ready mix	8 x 1.5 ml
ddH_2O	8 x 1.5 ml