Anti-Taq DNA Polymerase Mouse Monoclonal Antibody

CAT. NO. MA-019-200, 200 µg, 2 mg, 10 mg

APPLICATION

- Real-time or regular hot start PCR applications
- PCR diagnostics, genotyping, SNP etc
- Long-term storage of PCR kits

DESCRIPTION

Monoclonal anti-Taq antibodies are largely used to block the polymerase activity at low or room temperature, preventing pre-PCR mispriming and primer dimerization. When the temperature is raised, the antibody is quickly inactivated and PCR (or real-time PCR) proceeds. The use of Anti-Taq Monoclonal Antibody significantly improves the specificity of PCR amplification what is especially important for PCR-based diagnostics, particularly low-copy-number amplifications.

This Monoclonal Anti-Taq Antibody can bind a variety of commercially available Taq DNA polymerases (native or recombinant).

CLONALITY

Mouse IgG1, clone# 6C

CONCENTRATION

2 mg/ml in 10 mM Tris-HCl (pH 7.0), 50 mM KCl, with 25% glycerol

STORAGE TEMPERATURE

-20°C.

REACTION BUFFER

The Anti-Taq Monoclonal Antibody reaction buffer is the same buffer used for the thermostable DNA polymerase

PURITY

> 95% by SDS-PAGE

ASSOCIATED ACTIVITIES

No conversion to the covalently closed circular DNA to the nicked or linear form was observed after incubation of 1 µg of pUC19 with antibodies in final concentration of 1 ng/µl in 20 µl of reaction mixture containing 25 mM Tris-HCl (pH 7.9), 100 mM NaCl, 10 mM $MgCl_2$ after 16 hours at 37°C.

PROTOCOL

1. Before making any dilution of anti-Taq antibody and Taq DNA polymerase, add 2 µg anti-Taq monoclonal antibody to 1 µgTaq DNA polymerase (50-5,000U).
2. Mix gently and incubate at RT for about 5-10 minutes or store at 4°C.
3. Set up the PCR reaction by following the protocol of a regular thermal cycling condition used for the Taq DNA polymerase.
4. For detailed protocol, see our website at: http://www.eEnzyme.com/protocols/HotStart PCR Titration Guide.pdf

NOTE: for each Taq DNA polymerase or Taq from different batch, the antibody titration test must be performed to find the best ratio of antibody to Taq DNA polymerase.
Too much antibody added to Taq DNA polymerase could kill the PCR reaction.

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