

XT-5 PCR System

Description: XT-5 PCR System is useful to amplify upto 5 kb target DNA from genomic DNA templates. A well-defined ratio of enzymes along with a set of highly optimized buffer systems (Assay buffers 5A and 5B) ensures specific PCR products. Assay buffer 5A is used for obtaining highly specific target DNA with suboptimal yield while assay buffer 5B is best utilized for higher yields.

XT-Polymerase buffer 5A: (1X)

10 mM TAPS (pH 8.8), 50 mM KCl, 1.75 mM MgCl₂ and 0.01% Gelatin.

XT-Polymerase buffer 5B: (1X)

50 mM Tris (pH 9.1), 16 mM (NH₄)₂SO₄, 1.5 mM MgCl₂.

Buffers supplied at 10X concentration.

Storage Buffer: 20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.1mM EDTA, 1mM DTT, 0.5% Tween 20, 0.5% Igepal and 50% glycerol.

Specification:

Enzyme is supplied at a concentration of 3U/μl. With every order of XT-5 PCR system we supply one vial each of 10X assay buffers 5A and 5B.

Application:

- Useful for high efficiency PCR amplifications. The products obtained can be used for gene cloning and other genetic manipulations.
- Ensures higher yields of the amplified product with improved fidelity

Ordering Information:

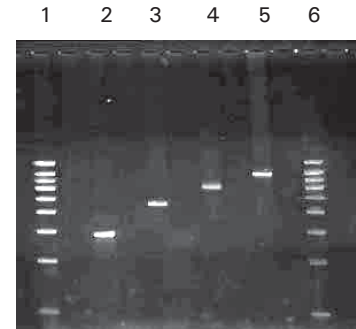
Product	Size	Cat #
XT-5 PCR system	100 U	105899
XT-5 PCR system	250 U	105898

Performance Test:

XT-5 PCR system is tested for PCR amplifications of fragment sizes - 0.2 kb to 8.0 kb using both human genomic DNA and lambda DNA as templates. Sequence specific primers were used for amplifications.

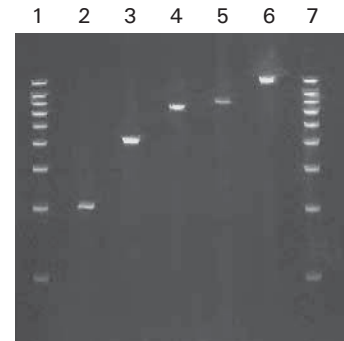
Store at : -20°C

- Lane 1 & 6:
1 kb DNA ladder
- Lane 2: 2930 bp
- Lane 3: 4794 bp
- Lane 4: 6495 bp
- Lane 5: 8055 bp



Amplification of human genomic DNA using XT-5 PCR system. Specific target sequences of 3.0 to 8.0 kb were amplified using tPA gene sequence specific primers and 1.5 units of XT-5 PCR system and analysed on 1% agarose gel.

- Lane 1 & 7:
1 kb DNA ladder
- Lane 2: 2050 bp
- Lane 3: 3996 bp
- Lane 4: 6284 bp
- Lane 5: 6989 bp
- Lane 6: 9904 bp



Amplification of Lambda DNA using XT-5 PCR system. Target sequences of 2.0 to 10.0 kb were amplified using sequence specific primers and 1.5 units of XT-5 PCR system and analysed on 1% agarose gel.