



AviTooX™

Cat. No.: A10110	50 Reactions
Cat. No.: A10111	100 Reactions
Cat. No.: A10112	500 Reactions

Store at -20 °C

Component	A10110	A10111	A10112
AviTooX™	0.5 ml	1ml	5x 1ml

Description:

AviTooX™ contains:

- **AviTaQ™** (Taq DNA polymerase)
- Reaction buffer
- dNTPs mixture
- Protein stabilizer

And Optimizes the convenience to use by adding sediment for electrophoresis and 2X solution of loading dye.

In general, **AviTooX™** show no decline of activity compare with **AviTaQ™**, even in a room temperature.

AviTooX™ is good for under 3 Kb of PCR products.

Kit storage:

AviTooX™ should be stored at -20 °C.

Unnecessary repeated freeze/thawing should be avoided. Under these condition reagents are stable for two years from the date of production.

Features:

- Convenience to use and optimization
- 2mM final MgCl₂ concentration

General Reaction Protocol:

1. Thaw **AviTooX™**.
2. Prepare a master mix as following table.

Component	Volume	Final conc.
AviTooX™	10 µl	1X
Upstream Primer (10 pmol/ µl)	1 µl	0.5 pmol/µl
Downstream Primer (10 pmol/ µl)	1 µl	0.5 pmol/µl
Template DNA	Variable	10 fg~1 µg
PCR grade water	Variable	-
Total Volume	20 µl	-

- Mix the master mix and dispense appropriate volumes into PCR tubes. Centrifuge the reactions in a microcentrifuge for 10 seconds.
- Perform PCR using your standard parameters (3-step cycling).
- Separate the PCR products by agarose gel electrophoresis and visualize with **AviStain™**.

Amplification protocol:

Thermal cycler could be adjusted as example table.

Cycle	Time	Temp °C
1	4 min	95
	30 sec	94
30-35	30 sec	57
	30-60 sec	72
1	5 min	72

For PCR products longer than 3~4 Kb, use an extension time of approximately 1 min. per Kb DNA.

Agarose gel Electrophoresis:

Run the total 5-7 µl of PCR products alongside 3µl DNA marker on a 2% agarose gel containing **AviStain™**.

* A DNA fragment which is amplified by Taq DNA Polymerase has A-overhang, and it enables you to do cloning by using T-vector.

Disclaimers:

AviTooX™ is for **Research Use Only** and should only be used by trained professionals.