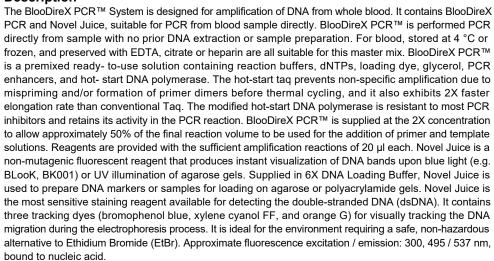
BlooDireX PCR™ System

Cat. No.: SM211-0100 Size: 100 reactions
Cat. No.: SM211-0010 Size: 10 reactions

Store at -20°C





Features

- Sample is added directly to PCR reaction, therefore there is no need for time-consuming and expensive DNA purification steps.
- Master Mix format with premixed gel loading dye minimizes possibility of cross-contamination, reduces sample handling time and allows directly loading to gel.
- > Amplify fragment size: up to 5 kilo base.
- ➤ High speed: 15-30 seconds/ kilo base.

Applications

Genotyping.Transgenic detection.

Gene knockout analysis.

Kit Contents

Contents	SM211-0100	SM211-0010
BlooDireX PCR™	1000 µl	100 µl
Novel Juice	1000 µl	50 µl

Quality Control

The quality of the BlooDireX PCR™ is tested on a lot-to-lot basis to ensure consistent product quality.

Required Materials

Blood samples

PCR tubes

PCR thermal cycler

Electrophoresis equipment

BlooDireX PCR™ System Protocol

The following table is recommended input size of materials:

Materials	Input size
Blood	1-10 % in the PCR Reaction

1. For each 20 µl reaction, assemble the following components in a 0.2 ml PCR tube on ice before the experiment:

Component	Volume (µI)	Final Concentration
BlooDireX PCR™	10	1X
Forward primer, 5-10 µM	Variable	0.1-0.2 μM
Reverse primer, 5-10 µM	Variable	0.1-0.2 μM
Raw material	Variable	-
Add ddH ₂ O to	20	

- 2. Mix gently. If necessary, centrifuge briefly. Cap the tube and place it in the thermal cycler.
- 3. To process in the thermal cycler for 25-35 cycles as follows:

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Process	Temperature (°C)	Time	Cycles
Initial Denaturation	95	10 minutes	1
Denaturation	95	30 seconds	25-35
Annealing	45-65*	30 seconds	
Extension	72	30 seconds	
Final extension	72	5 minutes	1
Hold	4	∞	1

^{*}Note: It may be necessary to optimize the system for individual primers, template, and thermal cycler.

4. After the PCR reaction, place the PCR product tubes on ice for the following analysis steps.

*Note: We recommended vortex the Novel Juice for 10 seconds prior to use.

Dilute 1 part Novel Juice with 5 parts PCR product and mix.

*Note: Novel Juice must be added to DNA markers in order to visualize the ladder bands simultaneously with the sample after electrophoresis.

- 5. Start electrophoresis.
- After the electrophoresis, remove gel and place on UV or a visible-light transilluminator to immediately visualize bands.
- 7. Gels can be post-stained with EtBr if desired.

Troubleshooting

Refer to the table below to troubleshoot problems that you may encounter when PCR with the reagent:

Problem	Cause	Solution
Low yield of PCR products	Incomplete concentration of start materials	Use the appropriate method for the DNA preparation based on the amount of the starting materials.
There is no PCR band	Samples contain impurities that include PCR inhibitors	Try reducing the amount of starting material, thereby reducing the concentration of PCR inhibitors.
Non-specific,	Primers are non-specific	Optimized the PCR condition.
multiple bands, or a smear are observed	DNase contaminant	Maintain a sterile work environment to avoid contamination from DNase.

Related Ordering Information

Cat. No.	Description	Size
SA001-0500	AGAROSE Tablets	0.5g x 100 tablets
SD010-R600	1Kb DNA Ladder RTU	600 µl
BK001	BLooK LED Transilluminator	Set
BK002	pBLooK LED transilluminator	Set
BK003	μBLooK LED Transilluminator	Set