

Hieff™ Smearase III

Product Information

Product Name	Cat#	Specification
Hieff™ Smearase III	13473ES24	24 T
	13473ES96	96 T

Product Description

Hieff™ Smearase III is a new digestion reagent designed for high-throughput sequencing platforms. This product uses high-quality fragmentation enzymes, with stable enzyme digestion effect and low preference, which can effectively reduce the time and cost of fragmentation, get rid of the cumbersome ultrasonic steps, and make the fragmentation process simpler and more efficient.

Product Components

Components		13473ES24	13473ES96
13473-A	Smearase III Buffer	240 μL	960 μL
13473-B	Smearase III Enzyme	120 μL	480 μL
13473-C	Conditioning Solution	24 μL	96 μL

Shipping and Storage

All the components are shipped with ice packs and can be stored at -20° C for eighteen months.

Cautions

1. For your safety and health, please wear lab coats and disposable gloves for operation.
2. For research use only!

Instructions

DNA Fragment

1. Thaw the reagents in Table 1, mix the reagents upside down, and keep on ice for later use.
2. Prepare the reaction system in Table 1 on ice.

Table 1. DNA fragmentation reaction

Components	Volume (μL)	Volume (μL)
Input DNA	44 (H ₂ O)	45 (TE/EB/AE)
Smearase III Buffer	10	10
Smearase III Enzyme	5	5
Conditioning Solution*	1	0

【Note】: *Conditioning Solution is used to balance the difference in digestion size between H₂O and other DNA elution buffers in the system.

3. Mix by gently pipetting or vortex, and spin briefly to the bottom of the tube.
4. Place the above PCR tube in a PCR machine, set up the reaction program as shown in Table 2.

Table 2 DNA fragmentation PCR reaction

Temperature	Duration
Hot lid 105°C	On
4 °C	1 min*
30 °C	3-30 min
65 °C	15 min
4 °C	Hold

[Note]: * To avoid excessive enzyme digestion, please preset a 4°C reaction program.