

5X Sequencing Buffer

Product	Catalog #	Size
5X Sequencing Buffer	27396	1 ml
5X Sequencing Buffer	59710	2 ml
5X Sequencing Buffer	78901	10 ml

Description

The 5X Sequencing Buffer contains a buffer system that has been qualified for use in sequencing reactions. It allows use of a lower volume of dye terminator mix, reducing sequencing costs without affecting sequence accuracy or read length.

Storage Condition

Store at -20°C after opening. Thaw prior to use.

Quality Control

Field-tested for sequence quality and sequencing accuracy on a gel sequencer.

Recommended Protocol

1. Thaw the 5X Sequencing Buffer and briefly vortex.
2. Prepare a 2.5X working stock of the Sequencing Buffer by diluting the solution with an equal amount of water.
3. Prepare sequencing reactions (rxn) according to the table below:

	20 µl rxn	10 µl rxn	5 µl rxn
Dye terminator mix	4 µl	2 µl	1 µl
2.5X Seq. Buffer	4 µl	2 µl	1 µl
Template (100-500 ng/µl)	1 µl	1 µl	1 µl
Primer (3 pmol/µl)	1 µl	1 µl	1 µl
Water	10 µl	4 µl	1 µl

4. Cycle the reaction according to the following protocol:
 30 sec, 96°C; rapid ramp to
 15 sec, 50°C; rapid ramp to
 4 min, 60°C
 Cycle 35 times²

Notes

1. Concentrated (5X) Sequencing Buffer may be used to prepare reactions with higher buffer concentrations or for different dilution protocols according to user preferences.
2. Other cycle conditions may work well for individual users. Edge has found that these conditions work well for most samples processed in our labs using reduced volume and reduced terminator mix concentrations.

Warning: This product is intended for **research use only**. It is not to be used for diagnostic purposes in humans or animals.