Tagmentation Buffer (2x)

Cat. No. C01019043

Format: 100 µl/300 µl/1000 µl

Description

Diagenode Tagmentation Buffer (2x) is the recommended reagent to perform any tagmentation reactions. It can be used in combination with Diagenode Tagmentase on DNA or chromatin samples, as half of the total volume reaction. This is the reagent used in ATAC-seq experiments.

Storage conditions: Store at -20°C.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Examples of use : Diagenode Tagmentation Buffer (2x) can be used to perform the tagmentation step in the following protocols.

Fragmentation assay experiments:

- A fragmentation assay can be performed on lambda DNA, using the following incubation mix for 1 reaction:

Tagmentation Buffer (2x)	10 µl
lambda DNA (50 ng/ µl)	2 µl
Tagmentase loaded	1 µl
Nuclease-free water	7 µl

- The reaction is then incubated 7 minutes at 55°C
- The tagmentation can be stopped by addition of a SDS solution (0.2% final) for 5 minutes incubation at room temperature
- The DNA can then be analyzed on agarose gel

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ATAC-seq experiments:

- After cell lysis and nuclei isolation, the nuclei pellets can be incubated with the following mix for 1 reaction

Tagmentation Buffer (2x)	25 µl
Tagmentase loaded	2.5 µl
Digitonin 1%	0.5 µl
Tween20 10%	0.5 µl
PBS	16.5 µl
Nuclease-free water	5 µl
Nuclei pellet*	

** The number of nuclei per reaction will depend on the ATAC-seq experimental design. Successful tagmentation with the proposed protocol has been performed on 50,000 nuclei per reaction.*

- The reaction is then incubated 30 minutes at 37°C.
- The tagmentation reaction can then be stopped by addition of 250 µl of DNA Binding buffer from Diagenode MicroChIP DiaPure Columns (Cat. No. C03040001).
- The tagmented libraries can then be purified using the MicroChIP DiaPure Columns (Cat. No. C03040001), and amplified.