

## truSHEAR Buffer 11x

### INTRODUCTION

truSHEAR Buffer 11x has been optimized for mechanical DNA or RNA shearing using Covaris Focused-ultrasonicators and microTUBEs. This buffer ensures high yield and reproducibility in shearing distribution when pure DNA or RNA is used as the shearing substrate. truSHEAR Buffer is fully compatible with downstream NGS applications.

### REVISION HISTORY

Part Number	Revision	Date	Description of change
010400	A	May 2017	Initial Release
010400	B	July 2019	Added AFA-TUBE TPX volumes to Preparation table. Added reference for AFA-TUBE TPX settings in Workflow Step 2.

### CONTENT

Name	Part Number	Description	Composition
truSHEAR Buffer 11x (550 µl)	520247	550 µl truSHEAR Buffer stock at 11X working concentration. For addition to NA, dilute in TE or low TE buffer.	0.11% Tween 20
truSHEAR Buffer 11x (5.5 ml)	520248	5.5 ml truSHEAR Buffer stock at 11X working concentration. For addition to NA, dilute in TE or low TE buffer.	0.11% Tween 20

### STORAGE

truSHEAR Buffer should be stored at 2-8 °C.

### WORKFLOW

#### 1. Preparation

Add desired amount of truSHEAR Buffer to DNA preparation (see table below). We recommend the DNA is in TE or low TE buffer before adding truSHEAR Buffer.

Consumable	Total Shearing Volume	DNA Sample Volume	truSHEAR Buffer Volume
microTUBE-15	16.5 µl	15 µl	1.5 µl
microTUBE-50	55 µl	50 µl	5 µl
microTUBE-130	132 µl	120 µl	12 µl
AFA-TUBE TPX	55 µl	50 µl	5 µl

Sample Preparation with truSHEAR Buffer

## 2. Mechanical NA Shearing with Covaris Focused-ultrasonicator

For microTUBE, follow settings provided in the truSHEAR Buffer DNA Shearing Quick Guide. The truSHEAR buffer may affect current settings used without truSHEAR buffer. Run a time course for optimal results. The latest revision is accessible online. For using truSHEAR Buffer with the AFA-TUBE TPX consumables, please contact [applicationsupport@covaris.com](mailto:applicationsupport@covaris.com).

Quick Guide: truSHEAR Buffer [http://covarisinc.com/wp-content/uploads/pn\\_010401.pdf](http://covarisinc.com/wp-content/uploads/pn_010401.pdf)