

PRODUCT INSERT

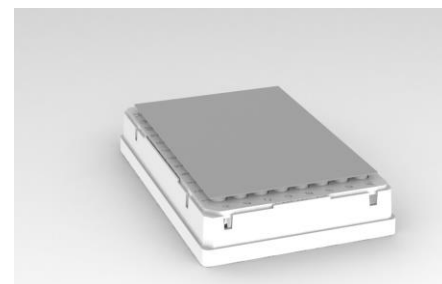


96 AFA-TUBE™ TPX Plate (PN 520291)

For current protocols: <http://covaris.com/resources/>

Intended Use

The product is designed for AFA-energetics™ sample processing in the following Covaris Focused-ultrasonicators: LE220-plus, LE220R-plus, LE220RSc, and the R230



Operating Limits:

Average Incident Power (AIP) --- Maximum	90 W continuous mode 250 W pulsing mode
Volume (max)	200 µl
Water level	Automatically adjusted
Centrifuge	2,200 x RCF maximum
Storage	Dry at ambient temperature and protected from direct sunlight

Ordering Information:

Name	Description	Part Number
96 AFA-TUBE TPX Plate	96 well AFA-TUBE Plate with aluminum-film seal	520291
Rack 96 AFA-TUBE TPX Plate	LE220-plus, LE220R-plus, and LE220Rsc rack	500684
PS Rack 96 AFA-TUBE TPX Plate	LE220-plus, LE220R-plus, and LE220Rsc Polysulfone rack	500622
R230 Rack 96 AFA-TUBE TPX Plate	R230 Rack	500610

Plate Definitions	
LE220-plus LE220R-plus LE220Rsc	"LE220plus_500684 96 AFA-TUBE TPX Plate 1.8 offset" (if Plate Definition is not in SonoLab contact Technical Support at TechSupport@covaris.com)
R230	contact Technical Support at TechSupport@covaris.com

Notes:

- Complies with the ANSI/SBS-4 standard for 96 well microplates
- Designed for use with automated 1, 8, and 96 channel pipettors
- Recommended instructions are subject to change without notice
- If incubating the AFA-TUBE TPX plate at temperatures > 60°C, a lid must be used to prevent adhesive foil seal failure

Revision History:

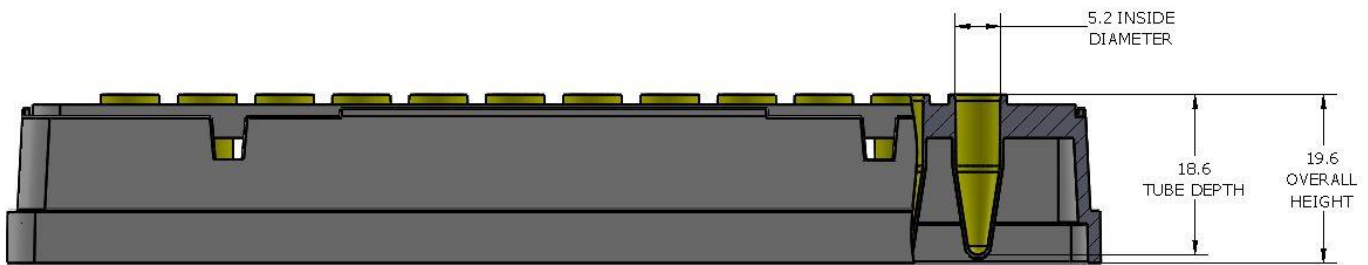
Part Number	Revision	Date	Description of change
010502	A	05/19	Release of 96 AFA-TUBE TPX Plate
010502	B	02/2020	Update PN for 96 AFA-TUBE TPX Plate and LE220-plus rack

In This Package:

- Ready-to-use 96 AFA-TUBE TPX Plate
- One Thin Foil seal
- Desiccant pouch

Nominal Plate Dimensions:

Overall Height (top of tube)	19.6 mm above mounting plane (without seal)
Tube center-to-center spacing	9.0 mm (SBS standard pattern)
Tube depth:	
• 8 AFA-TUBE TPX Plate	18.6 mm
• Interior clearance diameter	5.2 mm (maximum tip diameter 18.5 mm from end)



Instructions for Use:

CAUTION: REMOVE THE DESICCANT PACK PRIOR TO USE

The 96 AFA-TUBE TPX Plate is a ready-to-use sample processing vessel. The specially-designed plate is optimized for use with Covaris Adaptive Focused Acoustics® (AFA®).

The plate is designed as typical labware compatible with automation including heating blocks, magnetics stands, etc. It can be used on liquid handling platforms using 96 multichannel heads for pipetting with no adapter necessary. The plate may also be used with manual pipettes if needed. If volume is at maximum, be sure to pipette slowly from the top of the tube to ensure no sample displacement.

Recommended Sequence for Use:

1. Fill the tubes:

Dispense the samples about 2-3 mm above the bottom of the tube or at the bottom depending on sample volume.

2. Seal the plate for AFA-processing:

Remove the backing from the thin foil seal and carefully align it over the plate. Using a sealing paddle or a roller (or your fingers), thoroughly press the seal on the tubes verifying that the seal is adhered to the top of each tube. The plate is now ready to be processed in your Covaris instrument.

3. Pre AFA-Centrifugation:

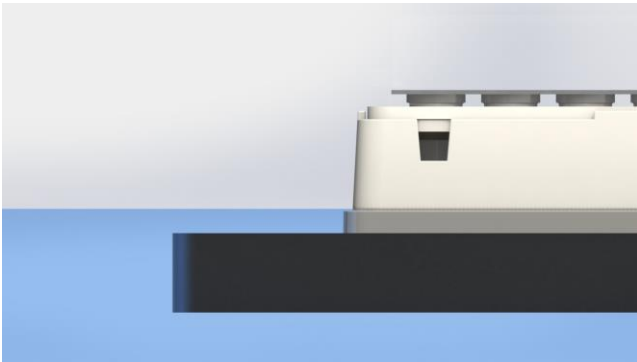
Centrifuge the plate after sample addition to ensure the sample is at the bottom of the tube at up to 2,200 RCF in a benchtop centrifuge compatible with 96 well plates for up to 60 seconds. **DO NOT STACK PLATES IN CENTRIFUGE.** Visually inspect plate to verify that all liquid is at the bottom of each tube before proceeding to Step 4.

4. AFA-processing (examples):

Refer to the Quick Guide, DNA shearing with LE220-plus, LE220R-plus, LE220Rsc Focused-ultrasonicator <http://covaris.com/resources/protocols/> or other application-specific protocol guide.

The plate must be in the Rack 96 AFA-TUBE TPX plate (PN 500684 or PN 500622) for processing.

Check that the water is filled to the top of the edge of the bottom flange after automatic water adjustment, as depicted below:



5. Post AFA-Centrifugation:

Centrifuge the plate after AFA up to 2,200 RCF before removing any sample. **DO NOT STACK PLATES IN CENTRIFUGE.**

6. Downstream sample handling:

After AFA® treatment, the samples are ready for downstream processing. The thin foil seal can be removed for processing in the 96 AFA-TUBE TPX Plate. Do not use the plate for long term storage of the samples.

Technical Assistance

- Telephone (+1) 781 932 3959 during the hours of 9:00am to 5:00pm, Monday through Friday, United States, Eastern Standard Time (EST) or Greenwich Mean Time (GMT) minus 05:00 hours
- E-mail ApplicationSupport@covaris.com