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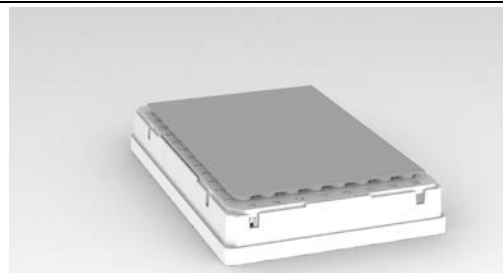


TITLE: Covaris 96 oneTUBE-10 AFA® Plate

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Operating Limits and Conditions:

AFA Temperature	4°C – 40°C
Maximum Peak Incident Power (PIP)	200W for DNA Shearing 500W (pulsing mode) for cell lysis applications
Volume	5 – 50 µl
Water level	Automatically adjusted in the LE220-plus
Centrifuge	2,200 x RCF maximum
Focused-ultrasonicator	LE220-plus
Rack	Rack 96 oneTUBE-10 AFA® Plate or PS Rack 96 oneTUBE-10 AFA® Plate



Ordering Information:

Name	Description	Part Number
96 oneTUBE-10 AFA Plate	96 well oneTUBE-10 AFA® Plate, ready to use, with aluminum-film seal	520249
Rack 96 oneTUBE-10 AFA Plate	Rack to be used during AFA® processing	500588
PS Rack 96 oneTUBE-10 AFA Plate	Polysulfone rack to be during AFA processing for cell lysis applications	500622

Product Name	96 oneTUBE-10 AFA® Plate
Part Number	520249
Compatible volume	5-50 µl
Validated volume	10 µl
LE220-plus Plate definition	“LE220plus_520249 96 oneTUBE Plate -2.2mm offset” (contact Customer Service at TechSupport@covaris.com if Plate Definition is not provided in SonoLab)

Notes:

- This plate must be used with the Rack 96 oneTUBE-10 AFA® Plate PN 500588 for DNA shearing or PN 500622 for cell lysis
- 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 oneTUBE 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
010432	A	12/17	Release of 96 oneTUBE-10 AFA® Plate
010432	B	04/18	Update of operating volumes, centrifugation, and dimensions for low profile plate
010432	C	01/19	Update volume range and validated volume
010432	D	2/19	Add polysulfone rack

In This Package:

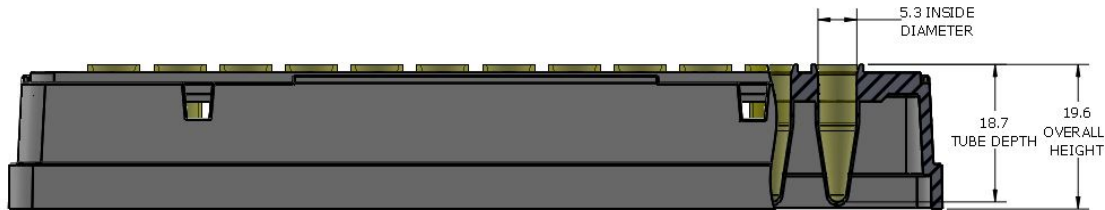
- Ready-to-use 96 oneTUBE-10 AFA® Plate
- One Thin Foil seal
- Desiccant pouch

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Nominal Plate Dimensions:

Overall Plate Height (top of tubes)	19.6 mm above mounting plane
Tube center-to-center spacing	9.0 mm (SBS standard pattern)
Tube depth:	
96 oneTUBE-10 AFA® Plate	18.7 mm (bottom is 0.5 mm above mounting plane)
Interior clearance diameter	5.0 mm (maximum tip diameter 18.5 mm from end)



NOTE: Store the plates at Room Temperature in a dry place before use.

Instructions for Use:

CAUTION: REMOVE THE DESICCANT PACK PRIOR TO USE

The 96 oneTUBE-10 AFA® 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:

Aspirate sample and dispense into the 96 oneTUBE-10 AFA® Plate. Dispense the samples about 2-3 mm above the bottom of the tube or at the bottom depending on sample volume being careful to dispense all the sample into the bottom of the tube.

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. Centrifugation:

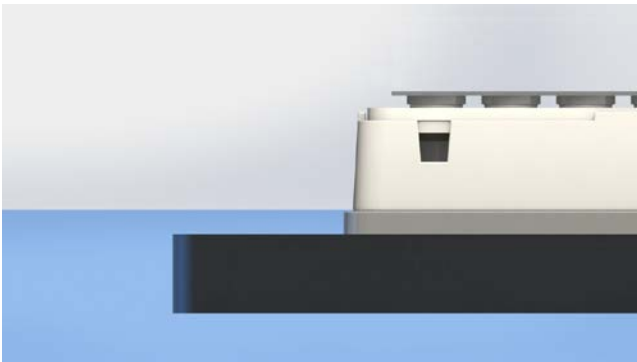
We recommend centrifuging the plate after sample addition to ensure the sample is at the bottom of the tube. Centrifuge the plate at up to 2,200 RPM in a benchtop centrifuge compatible with 96 well plates for up to 60 seconds. **DO NOT STACK PLATES IN CENTRIFUGE.** Visually inspect plate to verify that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

4. AFA-processing:

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

The plate must be in the Rack 96 oneTUBE-10 AFA® plate (PN 500588 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. Centrifugation:

It is recommended to centrifuge the plate after AFA® (up to 2,200g (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 oneTUBE-10 AFA® Plate. Do not use the plate for long term storage of the samples.

Technical Assistance

- By 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
- By e-mail at ApplicationSupport@covaris.com