Heated off-Board Lysis Protocol: Purification of pathogen nucleic acids from fluid samples using the MagAttract® 96 cador® Pathogen Kit

The MagAttract 96 cador Pathogen Kit (384) (cat. no. 947457) can be stored at room temperature (15–25°C). For expiry date information, consult the label on the kit box.

Further information

- MagAttract 96 cador Pathogen Handbook: www.qiagen.com/handbooks
- Technical assistance: toll-free 00800-22-44-6000, or www.qiagen.com/contact

Equipment and reagents to be supplied by user

- Adhesive tape or Tape Pads (cat. no. 19570)
- Thermoshaker suitable for S-blocks
- Optional: Centrifuge suitable for S-blocks

Important notes before starting

- Read the safety information in the BioSprint® 96 User Manual before use.
- Dissolve carrier RNA in Buffer AVE as indicated on the tube.
- Add isopropanol (100%) to Buffer ACB and ethanol (96–100%) to Buffers AW1 and AW2 before use. See the respective bottle labels for volumes.
- If using frozen samples, equilibrate to room temperature (15–25°C).
- If your sample volume is less than 200 μl, bring it to 200 μl with PBS or 0.9% NaCl.



- 96-Rod Covers are supplied as packs of 1 or 2, inserted into an S-Block. If using a pack of 2
 covers, store the second cover in another S-Block or plate. Take care to not bend the covers.
- Heat a thermoshaker to 70°C for use in step 5.

Procedure

- 1. Pipet 20 µl Proteinase K into the bottom of an S-Block.
- 2. Add 200 µl fluid sample to the Proteinase K.
 - Note: If your sample volume is less than 200 µl, bring it to 200 µl with PBS or 0.9% NaCl.
- 3. Add 100 µl Buffer VXL mixture to each sample in the S-Block.
- 4. Cover the S-Block with adhesive tape.
- 5. Incubate at 70°C, with constant agitation, for 10 min.
- 6. Optional: Briefly centrifuge the S-block to remove drops from the inside of the tape.
- 7. Remove the adhesive tape from the S-Block.
- 8. Prepare the Buffer ACB mixture (see Table 1) and mix thoroughly for 30s.

Table 1. Buffer ACB mixture preparation

		Number of samples*		
Reagent	1	48	96	
Buffer ACB	اب 400	19.2 ml	38.4 ml	
MagAttract Suspension G	25 µl	1.2 ml	2.4 ml	
Carrier RNA (1 µg/µl)	1 pl	ام 48	اµ 96	

^{*} Prepared volume is 107% of required volume, to compensate for pipetting errors and possible evaporation.

- 9. Add 400 µl Buffer ACB mixture to each sample in the S-Block.
- 10.Prepare 4 additional S-Blocks (slots 2–6) and one 96-Well Microplate MP, according to Table 2

Table 2. BioSprint 96 worktable setup and reagent volumes

6 Load Rod Cover S-Block Large 96-Rod Cover — 5 Load Elution 96-Well Microplate MP Buffer AVE 100 4 Load Wash 3 S-Block Ethanol (96–100%) 750 3 Load Wash 2 S-Block Buffer AW2 700	Slot	Loading message	Format	Item to add	Volume per well (µl)
4 Load Wash 3 S-Block Ethanol (96–100%) 750	6	Load Rod Cover	S-Block	Large 96-Rod Cover	_
	5	Load Elution	96-Well Microplate MP	Buffer AVE	100
3 Load Wash 2 S-Block Buffer AW2 700	4	Load Wash 3	S-Block	Ethanol (96–100%)	750
	3	Load Wash 2	S-Block	Buffer AW2	700
2 Load Wash 1 S-Block Buffer AW1 700	2	Load Wash 1	S-Block	Buffer AW1	700
1 Load Lysate S-Block Lysate* 720	1	Load Lysate	S-Block	Lysate*	720

^{*} Includes 20 µl Proteinase K, 200 µl sample, 100 µl Buffer VXL mixture and 400 µl Buffer ACB mixture.

- 11. Switch on the BioSprint 96 at the power switch.
- 12. Slide open the front door of the protective cover.
- 13. Select the "BS96 cador v2" protocol using the ▲ and ➤ keys.
- 14. Press "Start" and follow the messages for loading the worktable, as shown in Table 2.

