

Care and Use Instructions

Biotage® ACT Plate Adapter

Biotage® ACT Plate Adapter (patent pending) is designed to reduce or eliminate the occurrence of well-to-well cross contamination (cross talk) during extract evaporation. It fits on top of the 96-well collection plate during evaporation. Biotage ACT Plate Adapter ‘chimneys’ direct the gas flow into the wells. Evaporated gases are directed away from sample tubes, eddies are reduced, and the adapter reduces the open surface area of the top of the tubes/wells, lessening the likelihood that material can re-enter and contaminate adjacent tubes/wells.

Evaporator Compatibility

Biotage® ACT Plate Adapter is designed for use with ‘straight needle’ 96-well plate evaporators such as TurboVap® 96 Dual. It should not be used on TurboVap® style evaporators with angled needles.



Collection Plate Compatibility

Biotage ACT Plate Adapter is designed for use with the popular square well plate design (1 or 2 mL nominal well capacity (Biotage p/ns 121-5202 (1 mL) and 121-5203 (2 mL))). The chamfered design of the sealing edges allows the adapter to be fitted easily onto the collection plate. However, due to small differences in design and dimension tolerance between different plate suppliers, Biotage ACT Plate Adapter may not fit all brands of collection plate.



Solvent Compatibility

Biotage ACT Plate Adapter is constructed from anodized aluminum, and can be used safely with most solvents, acids and bases commonly used in sample preparation applications.

To limit any damage over time, clean the adapter as described (see cleaning guidelines).

Fitting and Removal

Note: Before using Biotage ACT Plate Adapter for the first time, clean according to instructions overleaf.

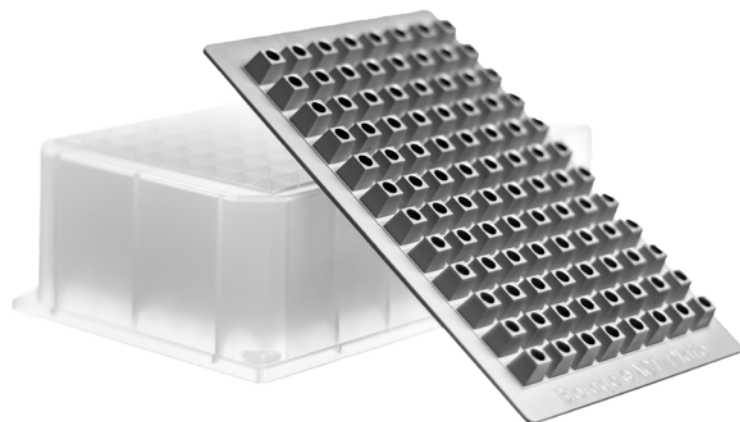
Fitting Biotage® ACT Plate Adapter

Wearing disposable laboratory gloves, place the plate adapter on top of the collection plate, with the well edges aligned. Press straight down gently until a seal is achieved. The adapter should be horizontal when fitted. Note: The outer rim of the adapter may not be in contact with the outer edges of the collection plate when sealed (as shown left).

Always take care not to splash solvent when fitting Biotage ACT Plate Adapter or moving the adapter to the evaporator.

Removing Biotage® ACT Plate Adapter

Gently lever all corners of the adapter upwards using a thin, flat plastic tool (for example, a lab spatula). Take care not to damage or bend the adapter when removing it from the collection plate after evaporation. Clean immediately after use.



Cleaning Biotage® ACT Plate Adapter

Clean immediately after use using the following procedure:

1. Rinse Biotage® ACT Plate Adapter thoroughly with deionized water
2. Soak in a glass dish with sufficient methanol to cover completely
3. Remove and dry using compressed air (or nitrogen)
4. Store the plate in a sealed bag.

Evaporator needles should also be cleaned between uses.

Replacement

Consider replacing Biotage ACT Plate Adapter after 250 uses (~1 year assuming use for evaporation of 1 plate of samples/day, plus overnight cleaning). If the plate is damaged, especially around well sealing area and chimneys, replace immediately.

Recommended Usage Guidelines

Maximum solvent volume per well of collection plate

We recommend the following maximum fill volumes, to minimize the possibility of solvent creep:

- » 1 mL collection plate: 0.75 mL max
- » 2 mL collection plate: 1.5 mL max

Evaporation gas flow and temperature

We have found that a gas flow rate of 40 L/min and gas temperature of 40 °C are optimum for most applications. Other conditions may be appropriate, and should be evaluated on an application specific basis.

Evaporator needle height settings

At maximum recommended fill levels and flow rates (see above), use the following guidelines:

- » 1 mL volume collection plate: set needle height ~2 mm above Biotage ACT Plate Adapter ‘chimneys’
- » 2 mL volume collection plate: set needle height to penetrate ~2 mm into Biotage ACT Plate Adapter ‘chimneys’

For lower volumes, it may be possible to lower the needles. This should be optimized on an application specific basis.

Ordering information

Part Number	Description	Quantity
414355SP	Biotage® ACT Plate Adapter	1
121-5202	Collection Plate, 1 mL Square	50
121-5203	Collection Plate, 2 mL Square	50



Patent Pending: PCT/US2014/059558