



## INSTRUCTIONS

### 96-Well Desalting Spin Plate

Part#: 96DP300

**Product Description:** Each well contains ~0.55mL resin slurry in 0.05% sodium azide and the recommended sample volume is up to 100 $\mu$ L. The exclusion limit of the resin is 7kD (proteins).

**Storage:** Upon receipt store at 4°C. Product is shipped at ambient temperature.

#### Introduction:

Analytical's high performance desalting spin plate contains a size exclusion chromatography resin that provides excellent protein desalting performance with high protein recovery in a centrifuge format. Samples containing as low as 20 $\mu$ g/mL of protein can be processed with  $\geq$  95% retention of salts and other small molecules (< 1000Da). The spin column method eliminates cumbersome column preparation or equilibration, allowing multiple –sample processing in <10 minutes.

#### Desalting or Buffer Exchange Procedure:

##### A. Additional Materials Required

- Variable-speed bench-top centrifuge with rotor and appropriate carriers capable of handling stacked plates at 1000 x *g*
- Buffer for exchange

##### B. General Procedure for Desalting Using Centrifugation

1. Equilibrate plate(s) to working temperature. Perform desalting at room temperature or at 4°C.
2. Remove the bottom seal from the plate(s) and place the plate on top of a wash plate.
3. Remove the top seal from the plate.
4. Place the assembly into a centrifuge with appropriate carriers capable of handling stacked plates, balance the centrifuge with appropriate plates and centrifuge at 1000 x *g* for 2 minutes to remove the storage buffer. Discard the flow-through.
5. If removal of residual sodium azide or buffer exchange is not required, proceed to step 7. Place the plate on top of a wash plate, add 250 $\mu$ L of ultra pure water or buffer on top of the resin bed and centrifuge at 1000 x *g* for 2 minutes. Discard the flow-through.
6. Repeat step 5 three additional times.

7. Stack the desalting plate on top of a sample collection plate, aligning the alphanumeric indices on the plates.
8. Apply up to 100 $\mu$ L of sample to each well and centrifuge at 1000 x *g* for 2 minutes to collect the desalted sample.

## Troubleshooting

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
Improper salt removal	Centrifugation problem	Do not exceed recommended centrifugation speed and time
		Balance the centrifuge with appropriate plates
	Improper sample loading	Apply sample directly to the center of the bed and avoid contact with sides of the column
Buffer does not flow through	Centrifugation problem	Make sure that the centrifuge is in working condition
		Make sure that the bottom closure is removed