



PHYTIP™ COVERS IN CAPTURE PURIFY ENRICH PROCESS

PhyNexus' proprietary PhyTip™ column technology is designed specifically to achieve the highest enrichment and purity possible for mini-scale preparations of functional proteins from microvolume starting samples of 1 mL or less. Because these high-capacity microcolumns are so small and possess virtually no dead volumes, it is possible to apply extremely small elution volumes to these columns. Typically, microvolume elution volumes of 10-20 µL are applied. However, a disadvantage with working with small samples is the threat of evaporation. To address this issue, PhyNexus has developed unique PhyTip Covers to enclose sample plates and dramatically decrease evaporation. Samples are protected from evaporation from 96 well plates at a variety of temperatures.

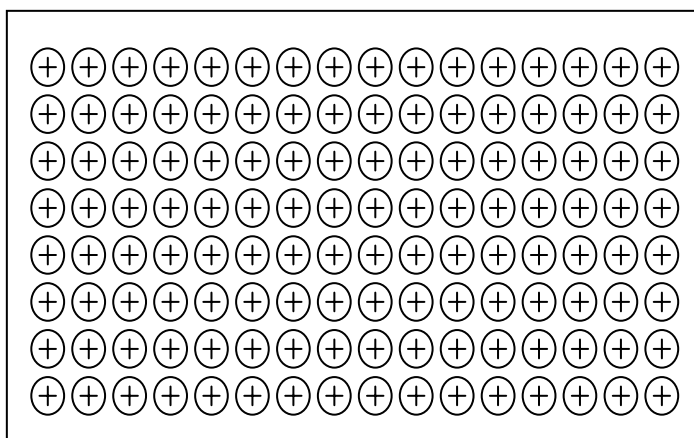


Figure 1. Schematic of cross cuts on covers of well plate.

By using PhyTip covers, evaporation rates are significantly reduced allowing for unattended operation of the purification process and producing reproducible, quantitative data over the complete multi-well plate.

Results presented in Table 1 and Table 2 indicate that PhyTip Plate Covers are the ideal choice for researchers who need to reproducibly purify and enrich recombinant proteins and antibodies. Quantitative analysis of the purified protein demonstrates the Tip-to-Tip and Row-to-Row reproducibility of PhyTip columns due to maintaining the integrity of the elution buffer by using PhyTip Covers.

Temperature °C	Elution Volume Size (µL)	Elution Volume Remaining (%)
4	10	100
20	10	79
20	20	88
31	10	61

Table 1. Amount of an elution volume remaining in elution plate after two hours with a cover that has been pierced in every position.

Temperature °C	Elution Volume Size (µL)	Elution Volume Remaining (%)
37	10	65
37	20	89

Table 2. Amount of an elution volume remaining in elution plate after two hours with a fresh unpierced cover.

PhyTip Plate Covers (Roll of 100 covers)	Part Number PCP 96-10-20	\$ 95
PhyTip Elution Plates (100 sample plates, 96 200 µL wells, 'v' bottom)	Part Number PCP 96-00-10	\$ 195