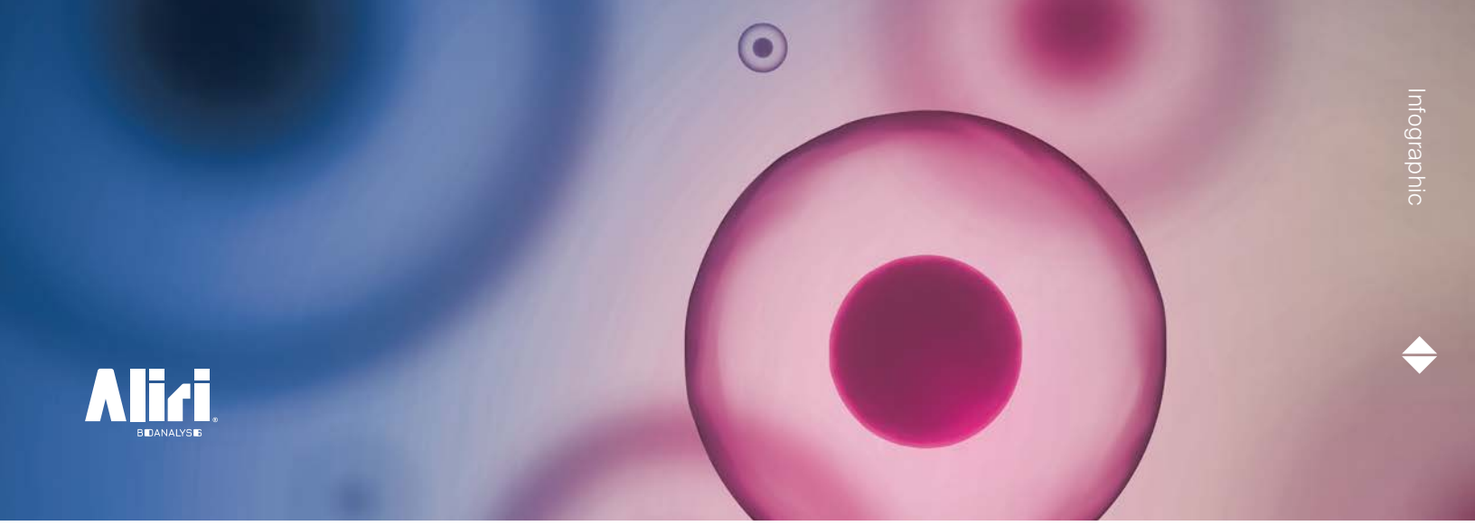

Infographic

SAMPLE PREPARATION FOR SMALL MOLECULES:

A Guide to the Advantages and Disadvantages

In the drug discovery process, the role of sample preparation is crucial for achieving accurate and reliable results. Our comprehensive guide offers valuable insights associated with preparing small molecule samples for analysis.

Sample preparation for small molecules involves three primary modes, each presenting its own set of advantages and disadvantages. To assist you in determining the most suitable mode for your needs, we have provided a list of advantages and disadvantages below.

SAMPLE PREPARATION MODE	ADVANTAGES	DISADVANTAGES
PROTEIN PRECIPITATION	• Very high throughput • Cost efficient • Low error propagation • Amendable to a large set of compound classes	• Very “dirty” sample • Non-selective • Does not perform well with increasing molecular weight
SUPPORTED LIQUID EXCHANGE	• Very high throughput • Very clean samples • Low error propagation • Selective	• Sample recovery can vary from well to well • Limited bed size options • Does not perform well with increasing molecular weight
LIQUID/LIQUID EXTRACTION	• Very clean samples • Consistent recovery from sample to sample • Selective	• Low throughput • Works with small and large sample aliquot volume • Does not perform well with increasing molecular weight
SOLID PHASE EXTRACTION	• Very clean samples • High throughput • Large choice of extraction phases • Works with small and large sample aliquot volume • Selective	• Less cost efficient • Potential well to well variance

Learn how our technical experts can help you find an approach that most closely aligns with your drug development goals.

