

Higgins Analytical Sample Preparation Cartridges

BioPureSPE™ TARGA® C18 Solid Phase Extraction Cartridges

- For extraction, concentration and clean-up of peptides glycans and other polar samples

Higgins BioPureSPE Solid Phase Extraction (SPE) cartridges are disposable sample cleanup cartridges which complement Higgins Analytical, Inc. HPLC columns. BioPureSPE cartridges are made from the same high quality silica and bonded with the same chemistries used in TARGA® C18 HPLC columns. Used in the extraction, concentration or cleanup of peptides glycans or other polar samples due to the ability to load in 100% water. BioPureSPE cartridges have similar selectivity and recovery as TARGA C18 HPLC columns (see example).

Applications

- Desalting glycan solutions
- Concentration of peptides
- Removal of HF and cleavage products from cleavage solutions
- Improvement of HPLC resolution by removal of early or late eluting by-products or reagents
- Useful for preparation of environmental and food samples

BioPureSPE TARGA® RPC Cartridges

BioPureSPE are available in two physical sizes:

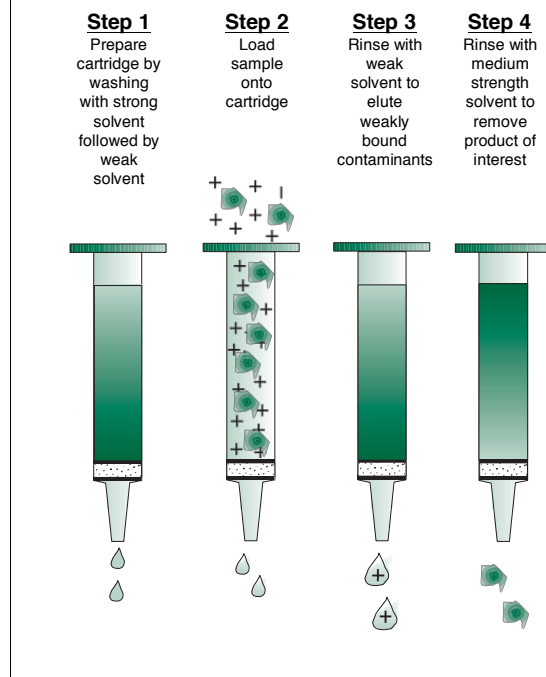
- 1-mL reservoir volume: 50 mg of 10µm material (peptide capacity: 0.5-0.75 mg), 50µL void volume
- 3-mL reservoir volume: 100 mg of 10µm material (peptide capacity: 1-1.5 mg), 100µL void volume.

BioPureSPE cartridges are packed five cartridges in a polyester bag with ten bags to a box.

Selection Guide and Ordering Information

Phase	Tube Vol	Cat. No.	Adsorbent
C18	1 mL	TSPE-0150-C181	TARGA C18, 120Å pore
	3 mL	TSPE-031C-C181	TARGA C18, 120Å pore

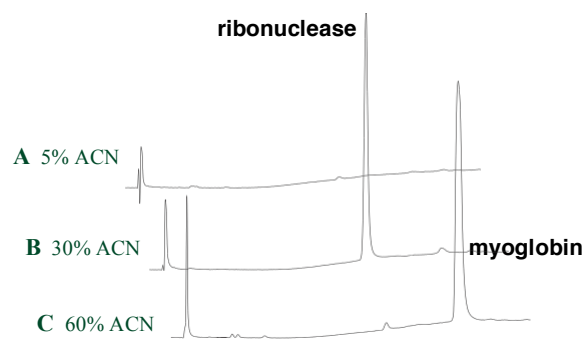
Easy To Use BioPureSPE Cartridge



Example

A 3 mL cartridge was conditioned with 1 mL of ACN followed by 1 mL of 100% water. Then loaded 100 mg each, ribonuclease and myoglobin in 100% water / 0.1% TFA. The cartridge was eluted with 0.2mL of 5% ACN / 0.1% TFA to remove weakly bound compounds. Elution with 0.2mL of 30% ACN / 0.1% TFA eluted the ribonuclease. Myoglobin was eluted with 0.2mL of 60% ACN / 0.1% TFA. Protein was measured in each wash by HPLC.

Analysis of the 5% ACN fraction (Figure A) revealed only a small amount of ribonuclease. Most of the ribonuclease eluted in the 30% ACN wash (Figure B). The myoglobin eluted entirely in the 60% ACN wash (Figure C).



HPLC Conditions:

TARGA C18 (C18, 5µm, 120Å, 4.6 mm x 50 mm). Gradient 15% to 70% ACN - 0.1% TFA in 10 min.