

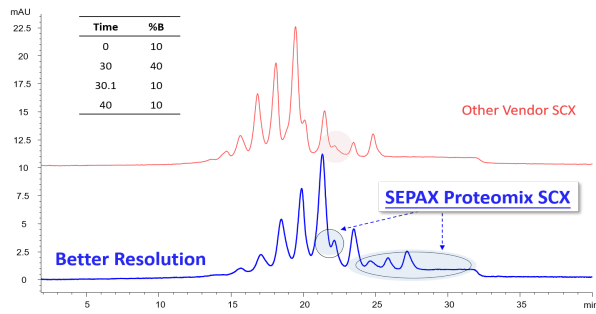
Charge Variants Analysis of Erbitux® with pH Gradient CEX-HPLC Vendor Comparison

This study discusses the performance comparison of Sepax Proteomix SCX and Proteomix WCX versus the benchmark SCX and WCX chromatography profiles on Erbitux® (cetuximab) a fusion/chimeric mAb by using pre-made commercially available pH gradient buffers from Thermo Scientific. Flow rates were normalized for column size so an equal comparison could be made; allowing for simple method development and consistency among both phase types.

1. Proteomix SCX showed better resolution of the basic species versus the benchmark SCX column.
2. Proteomix WCX also provided better resolution than the benchmark WCX.
3. Under this specific pH buffer system, for analysis of Erbitux, Proteomix SCX shows better peak separation than Proteomix WCX.
4. The proprietary surface modifications of Sepax's non-porous polymer substrate, as well as the ligand chemistry, results in unique selectivity of ionic variants allowing for greater separation.

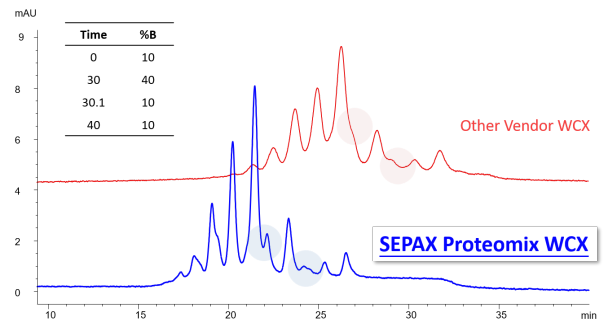
It is important to note that Sepax also sells semi-preparative and preparative columns in the same chemistry and particle size, allowing for efficient linear scalability (from ug-->grams) while achieving the same high-resolution separation. Such linear scalability allows for efficient fractionation of charge variants for further characterization.

Erbix® – Sepax Proteomix SCX vs Other Vendor SCX



Column: Proteomix SCX-NP5, 5 μ m, 4.6 x 250 mm PEEK (PN:401NP5P-4625); Other Vendor SCX PEEK, 5 μ m, NP 4.0 x 250 mm (P/N: REDACTED) **Mobile Phase:** CX-1 pH Buffer A; B: CX-1 pH Buffer B; **Flow velocity:** 480 cm/h; **System:** HPLC; **Column Temperature:** 30 $^{\circ}$ C; **Detection:** UV 280 nm; **Sample:** Erbitux® (2 mg/mL); **Injection volume:** 10 μ g

Erbix® – Sepax Proteomix WCX vs Other Vendor WCX



Column: Proteomix WCX-NP5, 5 μ m, 4.6 x 250 mm PEEK (PN:402NP5P-4625); Other Vendor WCX PEEK, 10 μ m, NP 4.0 x 250 mm (P/N: REDACTED) **Mobile Phase:** CX-1 pH Buffer A; B: CX-1 pH Buffer B; **Flow velocity:** 480 cm/h; **System:** HPLC; **Column Temperature:** 30 $^{\circ}$ C; **Detection:** UV 280 nm; **Sample:** Erbitux® (2 mg/mL); **Injection volume:** 10 μ g

Order Info

Sepax, Proteomix SCX-NP5 PEEK, 5 μ m, NP 4.6 x 250 mm
(P/N: **401NP5P-4625**)

Order Info

Sepax, Proteomix WCX-NP5 PEEK, 5 μ m, NP 4.6 x 250 mm
(P/N: **402NP5P-4625**)

A selection of different column dimensions (4.6, 7.8, 10, 21.1, 30, 50** mm ID) in 1.7, 3, 5 and 10 μ m particle sizes allows for seamless scalability from high resolution analytical characterization to fast preparative purification.