

Ultisil™ Bio-UHPLC Column

Features

PEEK-Lined
Stainless Steel
Column Hardware

Packing Pressure
Rating: 20,000 psi

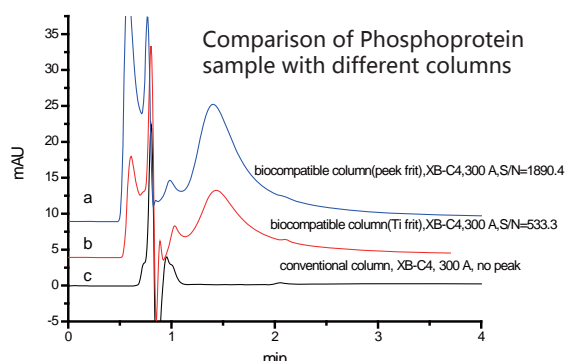
Operation Pressure
Rating: 15000psi

Maximum
Temperature: 80°C

Bonding Phases	Pore Size	Surface Area	pH Range	Endcapped
Ultisil™ Bio-UHPLC C4	300Å	100 m ² /g	2.0-9.0	Yes
Ultisil™ Bio-UHPLC C18	300Å	100 m ² /g	2.0-9.0	Yes
Ultisil™ Bio-UHPLC SEC*	300Å	100 m ² /g	2.0-9.0	No

SEC(Size Exclusion Chromatography) packing materials is the high purity, stable silica particles bonding hydrophilic polymers.

Dimension(mm)	Particle Size(μm)	Ultisil™ Bio-UHPLC C4	Ultisil™ Bio-UHPLC C18	Ultisil™ Bio-UHPLC SEC
4.6×100	1.8	00216-13639	00201-13639	00237-13639
2.1×100	1.8	00216-13612	00201-13612	00237-13612
2.1×50	1.8	00216-13610	00201-13610	00237-13610



Chromatographic conditions:
 Flow Rate: 0.2 mL/min
 Detection wavelength: 220 nm
 Column temperature: 30°C
 Injection volume: 4.0 μL
 Mobile phase:water/acetonitrile/TFA=90/10/0.1
 Solution preparation: dissolve accurately weighed quantities of Phosphoproteins in mobile phase to obtain a solution having concentrations of about 5mg of each per mL.

Fig. 1. The chromatogram of Phosphoproteins determined by three kinds of XB-C4 column (2.1×50 mm, 1.8 μm, 300 Å)

a. biocompatible column(peek frit); b. biocompatible column(Ti frit); c. conventional column
 The concentration of Phosphoproteins was 5mg/mL.

According the results shown in Fig. 1c, it can easily be seen that Phosphoproteins failed to elute when using conventional stainless steel columns. Fig 1a and 1b showed that under the same concentration condition, the general trend is that the signal to noise ratio (S/N) obtained with biocompatible column using peek frit is higher than the biocompatible column using Ti frit.