

# Xtimate® Polymer Based Column

Xtimate® Sugar-H is a special column designed for Ribavirin. Packed with H<sup>+</sup> modified low-linking polystyrene-divinylbenzene spheres (PS-DVB), this column can be applied for the analysis of organic acids and mixed alcohols.

Xtimate® Sugar-Ca is a strong cation exchange column packed with Ca<sup>2+</sup> modified PS-DVB resins; can be used for the analysis of sugar products.

Xtimate® PS/DVB is based on polystyrene-divinylbenzene. This column can be used in extreme conditions (pH 1-14).

## Xtimate® Sugar-H

pH Range	1.0-3.0
Particle Size	5 µm, 8 µm
Cross-link	8%
Counter Ion	H <sup>+</sup>
USP List	L17
Max. Temp.	95°C

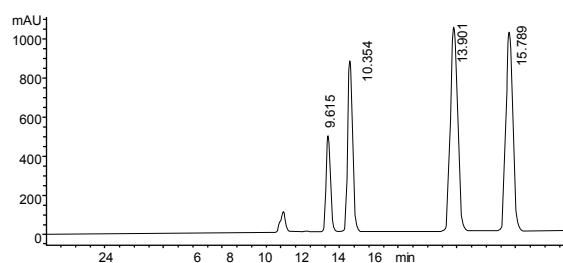
## Xtimate® Sugar-Ca

pH Range	5.0-9.0
Particle Size	5 µm, 8 µm
Cross-link	8%
Counter Ion	Ca <sup>2+</sup>
USP List	L19
Max. Temp.	95°C

## Xtimate® PS/DVB

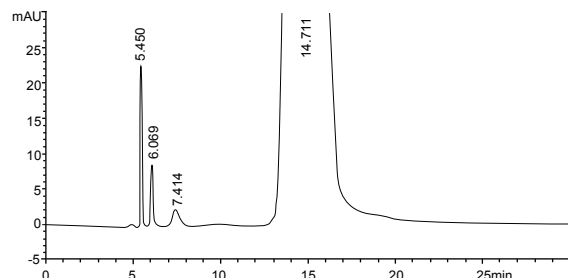
pH Range	1.0-14.0
Particle Size	5 µm, 10 µm
Surface Area(m <sup>2</sup> /g)	450(300 Å)
USP List	L21
Max. Temp.	75°C

## Separation of Organic Acids



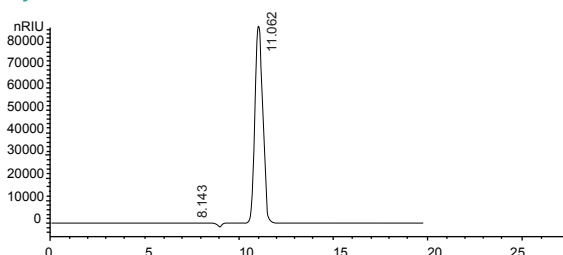
Column:	Xtimate® Sugar-H, 5 µm, 300 x 7.8 mm
Mobile Phase:	H <sub>2</sub> SO <sub>4</sub> water solution (pH 2.0)
Flow Rate:	0.5 mL/min
Temperature:	60°C
Detector:	RID
Injection Volume:	20 µL
Organic Acids:	Maleic acid, L-malic acid, fumaric acid, sodium acetate trihydrate

## Ketophenylalanine Calcium



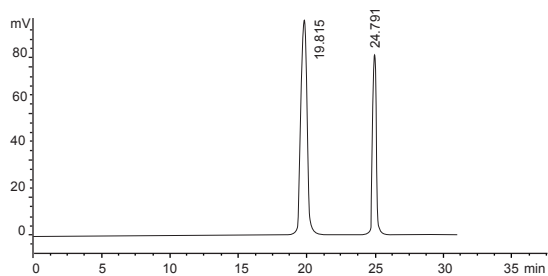
Column:	Xtimate® Sugar-H, 5 µm, 300 x 7.8 mm
Mobile Phase:	0.025 mol/L H <sub>2</sub> SO <sub>4</sub> water solution
Flow Rate:	0.8 mL/min
Temperature:	20°C
Detector:	205 nm
Injection Volume:	20 µL

## Xylose



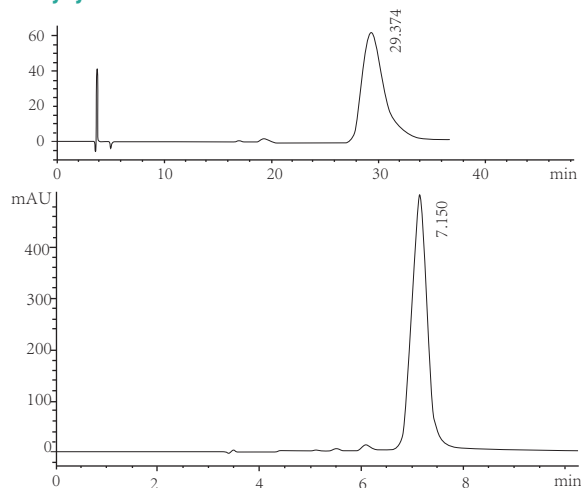
Column:	Xtimate® Sugar-Ca, 5 µm, 300 x 7.8 mm
Mobile Phase:	Ultra-pure water
Flow Rate:	0.6 mL/min
Temperature:	85°C
Detector:	RID 55°C
Injection Volume:	20 µL

## Mannitol



<b>Column:</b>	Xtimate® Sugar-Ca, 8 µm, 300 x 7.8 mm
<b>Mobile Phase:</b>	Ultra-pure water
<b>Flow Rate:</b>	0.5 mL/min
<b>Temperature:</b>	80°C
<b>Detector:</b>	20 µL
<b>Injection Volume:</b>	R of mannitol and Sorbitol >2

## Doxycycline HCl



<b>Column:</b>	Xtimate® PS/DVB, 8 µm, 250 x 7.8 mm
<b>Mobile Phase:</b>	50g TBA with 100 mL water, 200 mL buffer (pH 8.0), 25 mL TBAHS(10g/L, pH 8.0, adjust with NaOH), 5 mL EDTA(40 g/L, pH 8.0, adjust with NaOH), dilute to 500 mL with water
<b>Flow Rate:</b>	2.0 mL/min
<b>Temperature:</b>	75°C
<b>Detector:</b>	254 nm
<b>Injection Volume:</b>	20 µL
<b>Notes:</b>	Be sensitive to column temperature

## Ordering Information

### Xtimate® PS/DVB

Particle size	Column ID(mm)	Column Length (mm)	
		250	300
5 µm	4.6	00111-21043	00111-21044
	7.8	00111-21051	00111-21052
5 µm	4.6	00111-23043	00111-23044
	7.8	00111-23051	00111-23052
10 µm	4.6	00111-33043	00111-33044
	7.8	00111-33051	00111-33052

### Xtimate® Sugar-H

Particle size	Column ID(mm)	Column Length (mm)		
		150	250	300
5 µm	4.6	00109-41041	00109-41043	00109-41044
	7.8	00109-41050	00109-41051	00109-41052
8 µm	4.6	00109-43041	00109-43043	00109-43044
	7.8	00109-43050	00109-43051	00109-43052

### Xtimate® Sugar-Ca

Particle size	Column ID(mm)	Column Length (mm)		
		150	250	300
5 µm	4.6	00108-41041	00108-41043	00108-41044
	7.8	00108-41050	00108-41051	00108-41052
8 µm	4.6	00108-43041	00108-43043	00108-43044
	7.8	00108-43050	00108-43051	00108-43052

Don't see your needed size or format? Contact Welch or your local distributor for other dimensions.