

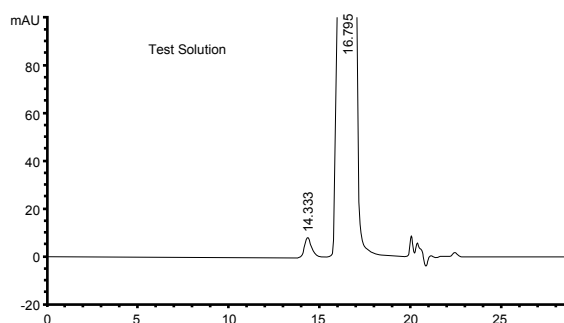
## Xtimate® SEC

Xtimate® SEC (size exclusion chromatography), also known as "global protein hydrophilic modified silica column", is made from ultra-high purity, stable silica bonded with hydrophilic polymer and diol functional groups. This double bonding mechanism, which makes possible of nonspecific adsorption of high Mw polymers, proteins, biological enzymes, polypeptides and other biological samples, can be applied to separating water-soluble polymers from biomacromolecules.

- Ultra-high purity, stable silica bonded with hydrophilic polymer and diol functional groups.
- 5 µm or 3 µm silica microsphere, high separation efficiency
- 120 Å minibore columns fit for analysis of polar compounds such as cephalosporins; 300Å ones fit for biomacromolecules such as proteins and polypeptides.
- Five pore sizes: 120 Å, 300 Å, 500 Å, 700 Å and 1000 Å.

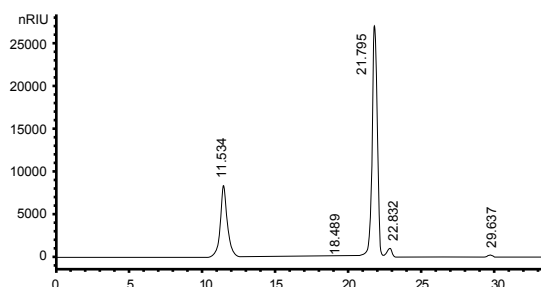
	Xtimate® SEC-300	Xtimate® SEC-500	Xtimate® SEC-700	Xtimate® SEC-1000
	Silica particles bonding hydrophilic polymer	Silica particles bonding hydrophilic polymer	Silica particles bonding hydrophilic polymer	Silica particles bonding hydrophilic polymer
<b>Particle Size(µm)</b>	3, 5	3, 5	5	5
<b>Pore Size(Å)</b>	120	300	500	700
<b>Protein Molecule Range</b>	500-150,000	5,000-1,250,000	10,000-3,500,000	15,000-5,000,000
<b>Soluble Polymer Molecule Mass Range</b>	500-25,000	1,000-100,000	2,000-500,000	2,500-500,000
<b>Maximum Pressure</b>	~4,500	~3,500	~3,000	~3,000
<b>pH Range</b>	2-7.5 (7.5-9.5 for short time)	2-7.5 (7.5-9.5 for short time)	2-7.5 (7.5-9.5 for short time)	2-7.5 (7.5-9.5 for short time)
<b>Range of Salt Concentration</b>	20 mM-2.0 M	20 mM-2.0 M	20 mM-2.0 M	20 mM-2.0 M
<b>Highest Temperature(°C)</b>	~80°C	~80°C	~80°C	~80°C
<b>Mobile Phase</b>	Aqueous or organic phase	Aqueous or organic phase	Aqueous or organic phase	Aqueous or organic phase

### Sex Hormone in Cosmetics



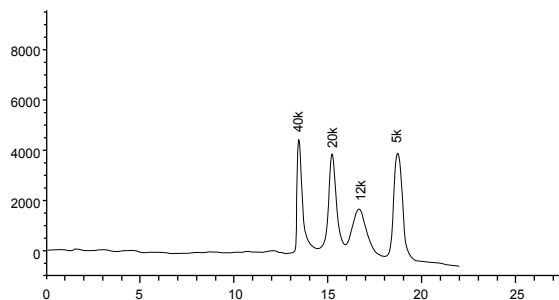
<b>Column:</b>	Xtimate® SEC-120, 3 µm, 300 x 7.8 mm
<b>Mobile Phase:</b>	Acetic acid/acetonitrile/ 0.1% arginine=15/20/65
<b>Flow Rate:</b>	0.5 mL/min
<b>Temperature:</b>	35°C
<b>Detector:</b>	276 nm
<b>Injection Volume:</b>	100 µL

### Iron Dextran



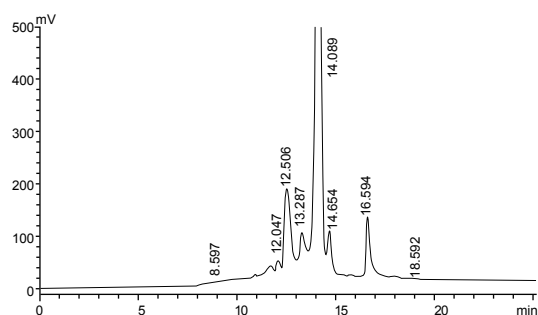
<b>Column:</b>	Xtimate® SEC-300, 5 µm, 300 x 7.8 mm
<b>Mobile Phase:</b>	Dissolve 7.1g Na <sub>2</sub> SO <sub>4</sub> to 1000 mL water, filter
<b>Flow Rate:</b>	0.5 mL/min
<b>Temperature:</b>	Ambient
<b>Detector:</b>	RID
<b>Injection Volume:</b>	20 µL

### Analysis of Molecular Weight of Polyethylene Glycol



<b>Column:</b>	Xtimate® SEC-300, 5 µm, 300 x 7.8 mm
<b>Mobile Phase:</b>	Ultrapure Water
<b>Flow Rate:</b>	1.0 mL/min
<b>Temperature:</b>	40°C, RID: 40°C
<b>Detector:</b>	RID
<b>Injection Volume:</b>	20 µL

### Cefoxitin Sodium



<b>Column:</b>	Xtimate® SEC-120, 5 µm, 300 x 7.8 mm
<b>Mobile Phase:</b>	Phosphate buffer/acetonitrile=95/5
<b>Flow Rate:</b>	0.9 mL/min
<b>Temperature:</b>	30°C
<b>Detector:</b>	232 nm
<b>Injection Volume:</b>	20 µL

### Ordering Information

#### Xtimate® SEC

Bonded phase	Particle size	Column ID(mm)	Column Length (mm)	
			250	300
SEC-120	3 µm	4.6	00237-21043	00237-21044
		7.8	00237-21051	00237-21052
	5 µm	4.6	00237-31043	00237-31044
		7.8	00237-31051	00237-31052
SEC-300	3 µm	4.6	00237-23043	00237-23044
		7.8	00237-23051	00237-23052
	5 µm	4.6	00237-33043	00237-33044
		7.8	00237-33051	00237-33052
SEC-700	5 µm	4.6	00237-34043	00237-34044
		7.8	00237-34051	00237-34052
SEC-1000	5 µm	4.6	00237-35043	00237-35044
		7.8	00237-35051	00237-35052

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



**JASCO France**  
17 rue des Cerisiers  
91090 LISSES

Site web : [jascofrance.fr](http://jascofrance.fr)  
Mail : [jascofrance@jascofrance.fr](mailto:jascofrance@jascofrance.fr)  
Tél : 01.64.97.09.60