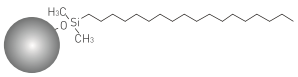
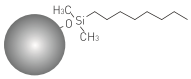
Xtimate® HPLC Column

Besides C18 and C8 bonded phases, Xtimate also provides C4, CN, Phenyl bonded phases.
Xtimate® applies a new special Smoothpak™ technique to C18, C8, C4, CN, Phenyl and amino phases, different than the bonding method of other series. As a result, Xtimate® provides a different selectivity, improved stability and reproducibility. In particular, for the Phenyl phase of Phenyl-Hexyl, Xtimate® is totally different from Ultisil™ Phenyl. Xtimate® Phenyl phase's longer hexyl group provides extra hydrocarbon interaction and longer retention than conventional phenyl-propyl phase; it also provides better chemical stability.
Welch also adds polar embedded phase, Polar-RP on Xtimate® particles, to further improve peak shape for very polar and strong basic compounds and provides different selectivity than does C18 phase.

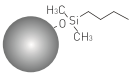
Xtimate® C18

Structural Formula	
pH Range	1.0-12.5
Particle Size	3 μm, 5 μm, 10 μm
Surface Area(m^2/g)	320(120 Å)
Carbon Loading(%)	14(120 Å)
USP List	L1
Endcapped	Yes

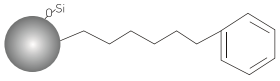
Xtimate® C8

Structural Formula	
pH Range	1.0-12.5
Particle Size	3 μm, 5 μm, 10 μm
Surface Area(m^2/g)	320(120 Å)
Carbon Loading(%)	10(120 Å)
USP List	L7
Endcapped	Yes

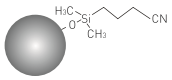
Xtimate® C4

Structural Formula	
pH Range	1.0-12.5
Particle Size	3 μm, 5 μm
Surface Area(m^2/g)	320(120 Å)
Carbon Loading(%)	8(120 Å)
USP List	L26
Endcapped	Yes

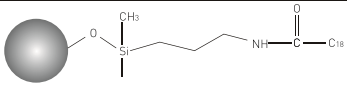
Xtimate® Phenyl-Hexyl

Structural Formula	
pH Range	1.0-12.5
Particle Size	3 μm, 5 μm
Surface Area(m^2/g)	320(120 Å)
Carbon Loading(%)	12(120 Å)
USP List	L11
Endcapped	Yes

Xtimate® CN

Structural Formula	
pH Range	1.0-12.5
Particle Size	5 μm
Surface Area(m^2/g)	320(120 Å)
Carbon Loading(%)	7(120 Å)
USP List	L10
Endcapped	Yes

Xtimate® Polar-RP

Structural Formula	
pH Range	1.0-12.5
Particle Size	5 μm
Surface Area(m^2/g)	320(120 Å)
Carbon Loading(%)	16(120 Å)
USP List	L1
Endcapped	Yes

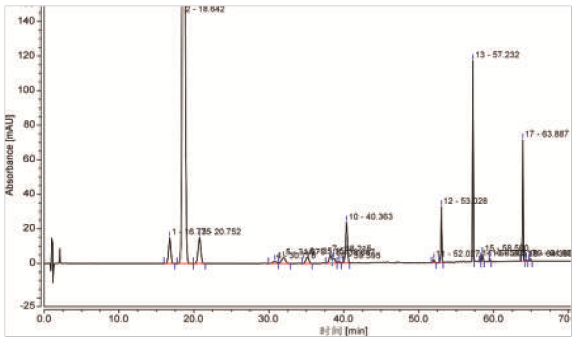
Xtimate® Lactose-NH_2

pH Range	2.0-8.0
Particle Size	5 μm
Surface Area(m^2/g)	450(120 Å)
Carbon Loading(%)	7(120 Å)
USP List	L8
Endcapped	No

Xtimate® XB-SCX

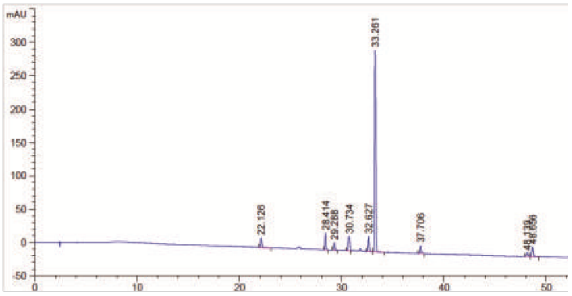
pH Range	2.0-8.0
Particle Size	5 μm
Surface Area(m^2/g)	300(120 Å)
Carbon Loading(%)	2(120 Å)
USP List	L9
Endcapped	No

Rosuvastatin Calcium



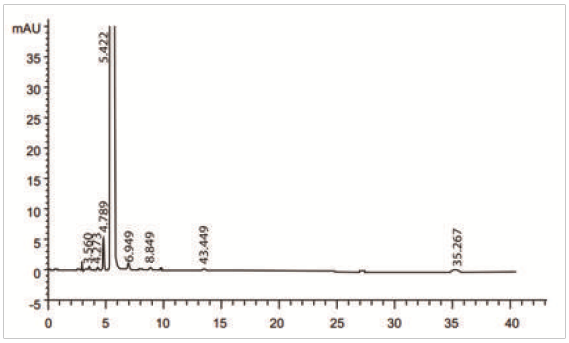
Column:	Xtimate® C18, 3.0 ×150 mm, 3 μm
Mobile Phase:	A: 1% TFA/acetonitrile/water=1/29/70 B: 1% TFA/acetonitrile/water=1/75/24
	Time(min) A(%) B(%) 0-30 100 0 30-50 100-50 0-40 50-60 60-0 40-100 60-70 0 100
Flow Rate:	0.75 mL/min
Temperature:	40°C
Detector:	242 nm
Injection Volume:	10 μL

Cangrelor



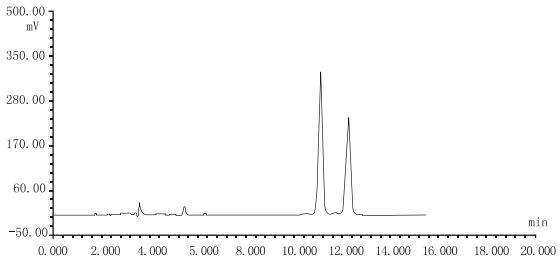
Column:	Xtimate® C18, 4.6 ×250 mm, 5 μm
Mobile Phase:	Mobile phase A: 0.05 mol/L K_2HPO_4(pH 8.5) Mobile Phase B: acetonitrile
	Time(min) A(%) B(%) 0 95 5 3 95 5 35 67 33 50 60 40 60 35 65 65 35 65 66 95 5 75 95 5
Flow Rate:	1.0 mL/min
Temperature:	25°C
Detector:	242 nm
Injection Volume:	5 μL

Valaciclovir Hydrochloride



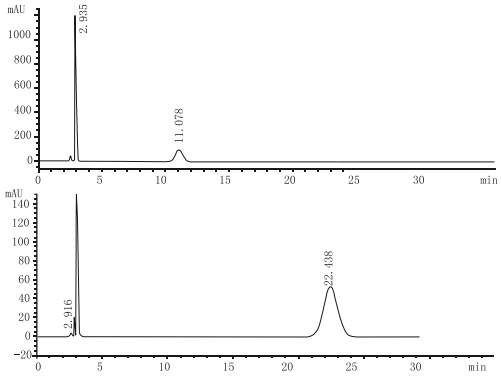
Column:	Xtimate® Phenyl-Hexyl, 250 x 4.6 mm, 5 μm
Mobile Phase:	Methanol/0.01mol/L KH_2PO_4(pH3.0)=15/85
Flow Rate:	1.0 mL/min
Temperature:	35°C
Detector:	251 nm
Injection Volume:	20 μL

Omeprazole



Column:	Xtimate® C8, 250 x 4.6 mm, 5 μm
Mobile Phase:	10 mmoL/L Na_2HPO_4(pH7.4)/ Acetonitrile=70/30
Flow Rate:	1.0 mL/min
Temperature:	Ambient
Detector:	280 nm
Injection Volume:	20 μL

Enalapril Maleate



Column:	Xtimate® C8, 250 x 4.6 mm, 5 µm
Mobile Phase:	Phosphate buffer/acetonitrile=75/25
Flow Rate:	1.0mL/min
Temperature:	50°C
Detector:	280 nm
Injection Volume:	20 µL

Ordering Information

Xtimate® C18

Particle size	Column ID (mm)	Column Length (mm)										Guard Cartridge	Guard Column Holder
		30	33	50	75	100	125	150	200	250	300	10mm length	
3 µm	2.1	00101-11009	09101-11009	00101-11010	00101-11011	00101-11012	00101-11013	00101-11014	00101-11015	00101-11016	-	00808-23101	00808-01107
	3.0	00101-11018	-	00101-11019	00101-11020	00101-11021	00101-11022	00101-11023	00101-11024	00101-11025	-	00808-23101	00808-01107
	4.0	00101-11027	-	00101-11028	00101-21029	00101-11030	00101-11031	00101-11032	00101-11033	00101-11034	-	00808-03101	00808-01101
	4.6	00101-11036	11101-11036	00101-11037	00101-21038	00101-11039	00101-11040	00101-11041	00101-11042	00101-11043	-	00808-03101	00808-01101
5 µm	2.1	00101-21009	09101-21009	00101-21010	00101-21011	00101-21012	00101-21013	00101-21014	00101-21015	00101-21016	-	00808-24101	00808-01107
	3.0	00101-21018	-	00101-21019	00101-21020	00101-21021	00101-21022	00101-21023	00101-21024	00101-21025	-	00808-24101	00808-01107
	4.0	00101-21027	-	00101-21028	00101-21029	00101-21030	00101-21031	00101-21032	00101-21033	00101-21034	00101-21035	00808-04101	00808-01101
	4.6	00101-21036	11101-21036	00101-21037	00101-21038	00101-21039	00101-21040	00101-21041	00101-21042	00101-21043	00101-21044	00808-04101	00808-01101
10 µm	4.0	-	-	-	-	-	-	00101-31032	00101-31033	00101-31034	00101-31035	00808-05101	00808-01101
	4.6	-	-	-	-	-	-	00101-31041	00101-31042	00101-31043	00101-31044	00808-05101	00808-01101

Xtimate® C8

Particle size	Column ID (mm)	Column Length (mm)										Guard Cartridge	Guard Column Holder
		30	33	50	75	100	125	150	200	250	300	10mm length	
3 µm	2.1	00102-11009	09102-11009	00102-11010	00102-11011	00102-11012	00102-11013	00102-11014	00102-11015	00102-11016	-	00808-23102	00808-01107
	3.0	00102-11018	-	00102-11019	00102-11020	00102-11021	00102-11022	00102-11023	00102-11024	00102-11025	-	00808-23102	00808-01107
	4.0	00102-11027	-	00102-11028	00102-21029	00102-11030	00102-11031	00102-11032	00102-11033	00102-11034	-	00808-03102	00808-01101
	4.6	00102-11036	11102-11036	00102-11037	00102-21038	00102-11039	00102-11040	00102-11041	00102-11042	00102-11043	-	00808-03102	00808-01101
5 µm	2.1	00102-21009	09102-21009	00102-21010	00102-21011	00102-21012	00102-21013	00102-21014	00102-21015	00102-21016	-	00808-24102	00808-01107
	3.0	00102-21018	-	00102-21019	00102-21020	00102-21021	00102-21022	00102-21023	00102-21024	00102-21025	-	00808-24102	00808-01107
	4.0	00102-21027	-	00102-21028	00102-21029	00102-21030	00102-21031	00102-21032	00102-21033	00102-21034	00102-21035	00808-04102	00808-01101
	4.6	00102-21036	11102-21036	00102-21037	00102-21038	00102-21039	00102-21040	00102-21041	00102-21042	00102-21043	00102-21044	00808-04102	00808-01101
10 µm	4.0	-	-	-	-	-	-	00102-31032	00102-31033	00102-31034	00102-31035	00808-05102	00808-01101
	4.6	-	-	-	-	-	-	00102-31041	00102-31042	00102-31043	00102-31044	00808-05102	00808-01101

Xtimate® Phenyl-Hexyl

Particle size	Column ID (mm)	Column Length (mm)										Guard Cartridge	Guard Column Holder
		30	33	50	75	100	125	150	200	250	300	10mm length	
3 µm	2.1	00104-11009	09104-11009	00104-11010	00104-11011	00104-11012	00104-11013	00104-11014	00104-11015	00104-11016	-	00808-23106	00808-01107
	3.0	00104-11018	-	00104-11019	00104-11020	00104-11021	00104-11022	00104-11023	00104-11024	00104-11025	-	00808-23106	00808-01107
	4.0	00104-11027	-	00104-11028	00104-21029	00104-11030	00104-11031	00104-11032	00104-11033	00104-11034	-	00808-03106	00808-01101
	4.6	00104-11036	11104-11036	00104-11037	00104-21038	00104-11039	00104-11040	00104-11041	00104-11042	00104-11043	-	00808-03106	00808-01101
5 µm	2.1	00104-21009	09104-21009	00104-21010	00104-21011	00104-21012	00104-21013	00104-21014	00104-21015	00104-21016	-	00808-24106	00808-01107
	3.0	00104-21018	-	00104-21019	00104-21020	00104-21021	00104-21022	00104-21023	00104-21024	00104-21025	-	00808-24106	00808-01107
	4.0	00104-21027	-	00104-21028	00104-21029	00104-21030	00104-21031	00104-21032	00104-21033	00104-21034	00104-21035	00808-04106	00808-01101
	4.6	00104-21036	11104-21036	00104-21037	00104-21038	00104-21039	00104-21040	00104-21041	00104-21042	00104-21043	00104-21044	00808-04106	00808-01101