

InertSustain[®] AQ-C18

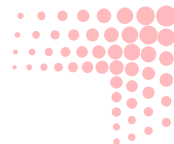
Maximizing retention for highly polar compounds in reversed phase methods with highly aqueous mobile phases



Physical Properties

Silica	ES (Evolved Surface) Silica Gel
Particle Size	1.9 μm, 3 μm, 5 μm
Surface Area	350 m^2/g
Pore Size	100 Å (10 nm)
Pore Volume	0.85 mL/g
Bonded Phase	Octadecyl Groups
End-capping	Complete
Carbon Loading	13.0 %
USP Code	L1
pH Range :	1 ~ 10

HPLC, LC/MS Columns



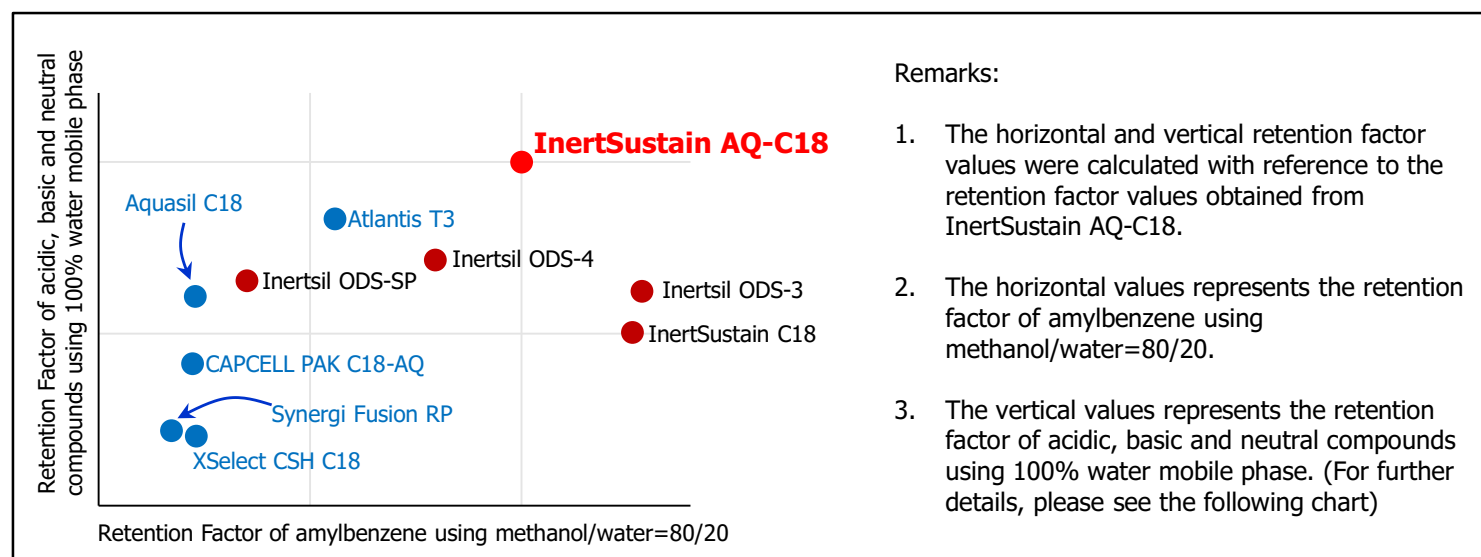
Benefits

1. Exceptional retention for highly polar compounds (hydrophilic)
2. Highly inert packing material results in less tailing of peaks for virtually any type of analytes
3. Extreme resistance to low and high pH mobile phases
4. Endlessly reproducible from column-to-column and batch-to-batch

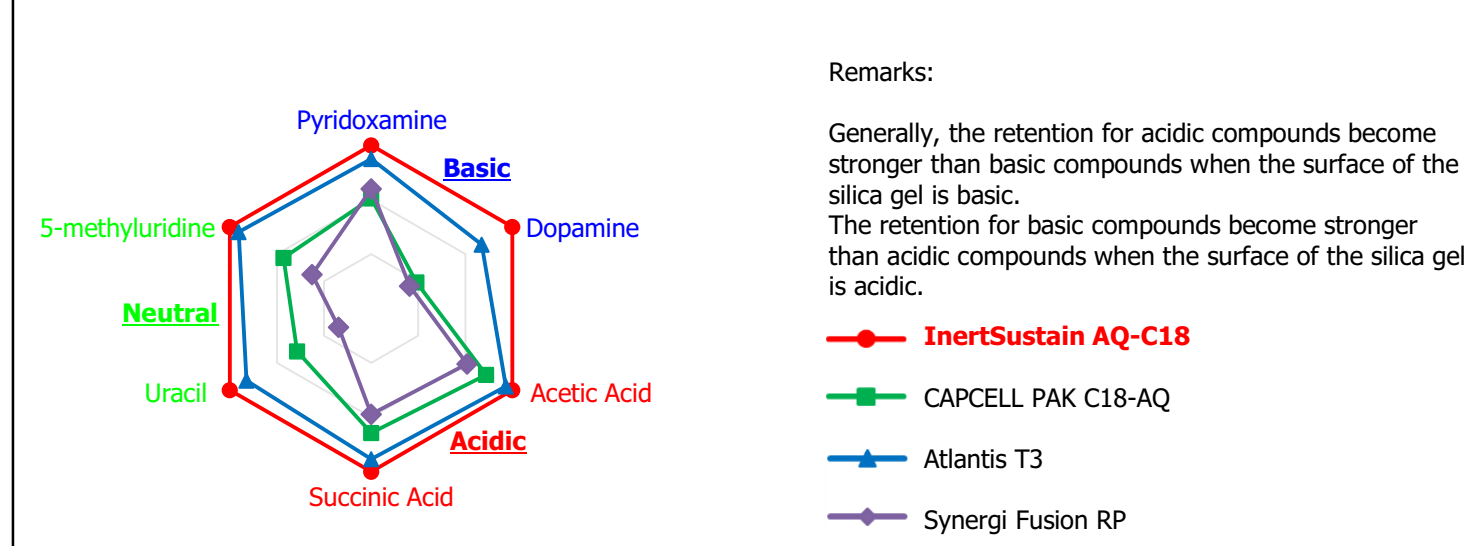
InertSustain AQ-C18 columns are designed to achieve strong retention for highly polar compounds, which is the most challenging goals in developing reversed phase methods. The optimization of bonding of the C18 groups at equal distance to the silica gel enable InertSustain AQ-C18 to offer significant retention for highly polar compounds even under water rich mobile phases.

As illustrated in the following plot, InertSustain AQ-C18 provided exceptional retention for highly polar compounds even under water rich mobile phases without dewetting or phase collapse.

Retention Properties of InertSustain AQ-C18



InertSustain AQ-C18 provided strong retention for all basic, neutral and acidic compounds under 100% water mobile phase



Ordering Information

Analytical Columns

Particle Size: μ P Max. Operating Pressure: 80 MPa (800 Bar)	Length/ I.D. (mm)	2.1	3.0
	50	5020-89938	5020-89941
	100	5020-89939	5020-89942
	150	5020-89940	5020-89943

※ End-fittings are UP Type end-fittings.

HP Series Particle Size: 3 μ P Max. Operating Pressure: 50 MPa (500 Bar)	Length/ I.D. (mm)	2.1	3.0	4.6
	30	5020-89920	5020-89926	5020-89932
	50	5020-89921	5020-89927	5020-89933
	75	5020-89922	5020-89928	5020-89934
	100	5020-89923	5020-89929	5020-89935
	150	5020-89924	5020-89930	5020-89936
	250	5020-89925	5020-89931	5020-89937

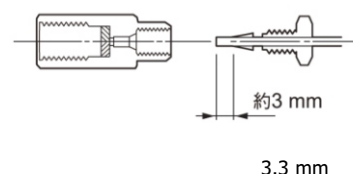
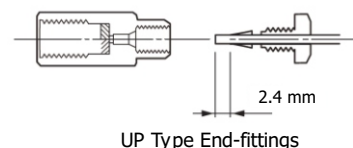
※ End-fittings are DMU compatible.

※ UHPLC compatible end-fittings are also available upon request for UHPLC systems (Ex: UPLC®) to avoid dead volume.

※ , QG FDM 38 37 S H H QG ILWQ V Z K H Q RU G L H J Q 3 EDV H Q RM W D V 8 3 W S H V Q R W D Y D E D I R U D P P , ' F R O X P Q

UPLC® is a registered trademark of Waters Corporation.

End-fitting Format



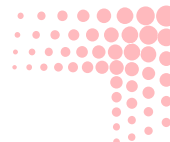
※ DMU compatible end-fittings

Particle Size: 3 μ m Max. Operating Pressure: 20 MPa (200 Bar)	Length/I.D. (mm)	1.0	1.5		
	30	5020-89871	5020-89877		
	50	5020-89872	5020-89878		
	75	5020-89873	5020-89879		
	100	5020-89874	5020-89880		
	150	5020-89875	5020-89881		
	250	5020-89876	5020-89882		
	Length/I.D. (mm)	2.1	3.0	4.0	4.6
Particle Size: 5 μ m Max. Operating Pressure: 20 MPa (200 Bar)	30	5020-89831	5020-89839	5020-89847	5020-89855
	50	5020-89832	5020-89840	5020-89848	5020-89856
	75	5020-89833	5020-89841	5020-89849	5020-89857
	100	5020-89834	5020-89842	5020-89850	5020-89858
	125	5020-89835	5020-89843	5020-89851	5020-89859
	150	5020-89836	5020-89844	5020-89852	5020-89860
	250	5020-89837	5020-89845	5020-89853	5020-89861
	Length/I.D. (mm)	1.0	1.5		
	30	5020-89741	5020-89747		
	50	5020-89742	5020-89748		
	75	5020-89743	5020-89749		
	100	5020-89744	5020-89750		
	150	5020-89745	5020-89751		
	250	5020-89746	5020-89752		
	Length/I.D. (mm)	2.1	3.0	4.0	4.6
	30	5020-89701	5020-89709	5020-89717	5020-89725
	50	5020-89702	5020-89710	5020-89718	5020-89726
	75	5020-89703	5020-89711	5020-89719	5020-89727
	100	5020-89704	5020-89712	5020-89720	5020-89728
	125	5020-89705	5020-89713	5020-89721	5020-89729
	150	5020-89706	5020-89714	5020-89722	5020-89730
	250	5020-89707	5020-89715	5020-89723	5020-89731

※ End-fittings are DMU compatible.

※ Other column sizes available upon request.





Ordering Information

Guard Column for UHPLC (Max. Operating Pressure 80 MPa, 800 Bar)

I.D. of the Analytical Column Applicable (mm)	Length (mm)	I.D. (mm)	Replacement Cartridge (2 pcs)	Cartridge (2 pcs) + Holder (1 pcs) Set	Replacement Cartridge (2 pcs)	Cartridge (2 pcs) + Holder (1 pcs) Set
			Particle Size 1.9 µm	Particle Size 1.9 µm	Particle Size 3 µm	Particle Size 3 µm
1.0	10	1.5	5020-89944	5020-89947	5020-89824	5020-89827
1.5, 2.1		2.1	5020-89845	5020-89948	5020-89825	5020-89828
2.1, 3.0		3.0	5020-89946	5020-89949	5020-89826	5020-89829
Holder for Guard Column for UHPLC						5020-08630

Cartridge Guard Columns

I.D. of the Analytical Column Applicable (mm)	Length (mm)	I.D. (mm)	Replacement Cartridge E (2 pcs)		Cartridge E (2 pcs) + Holder (1 pcs) Set	
			Particle Size		Particle Size	
			µm	µm	µm	µm
1.0	10	1.0	5020-89910	5020-89808	5020-89911	5020-89809
1.5,2.1		1.5	5020-89912	5020-89810	5020-89913	5020-89811
2.1,3.0		3.0	5020-89908	5020-89806	5020-89909	5020-89807
4.0,4.6		4.0	5020-89906	5020-89804	5020-89907	5020-89805
2.1,3.0	20	3.0	5020-89916	5020-89814	5020-89917	5020-89815
4.0,4.6		4.0	5020-89914	5020-89812	5020-89915	5020-89813
Holder for Cartridge Guard Column E				For 10 mm Length		5020-08500
				For 20 mm Length		5020-08550

- ※ End-Terminal VDU H : DMU-compatible.
- ※ Maximum operating pressure is 20 MPa, 200 Bar.

Preparative Columns

Particle Size: 5 µ P Max. Operating Pressure: 20 MPa (200 Bar)	Length/ I.D. (mm)	6.0	7.6	10	14	20
	50	5020-89757	5020-89761	5020-89765	5020-89769	5020-89773
	100	5020-89758	5020-89762	5020-89766	5020-89770	5020-89774
	150	5020-89759	5020-89763	5020-89767	5020-89771	5020-89775
	250	5020-89760	5020-89764	5020-89768	5020-89772	5020-89776

Preparative Guard Columns

Particle Size: 5 µ P Max. Operating Pressure: 20 MPa (200 Bar)	Length x I.D. (mm)	6.0	7.6	10	14	20
	50	5020-89777	5020-89778	5020-89779	5020-89780	5020-89781