

## Use SphereClone Columns as an Alternative to Spherisorb

- Performance guaranteed

SphereClone is packed only by Phenomenex, thereby reducing the chance of column-to-column variation. You will receive columns of consistent quality and reproducibility, and will benefit from Phenomenex's excellent customer support and technical service.

Below are listed side-by-side comparisons of physical material characteristics. As you can see, SphereClone™ and Spherisorb® compare very well for important specifications such as particle size, size, pore size, surface area and carbon load.

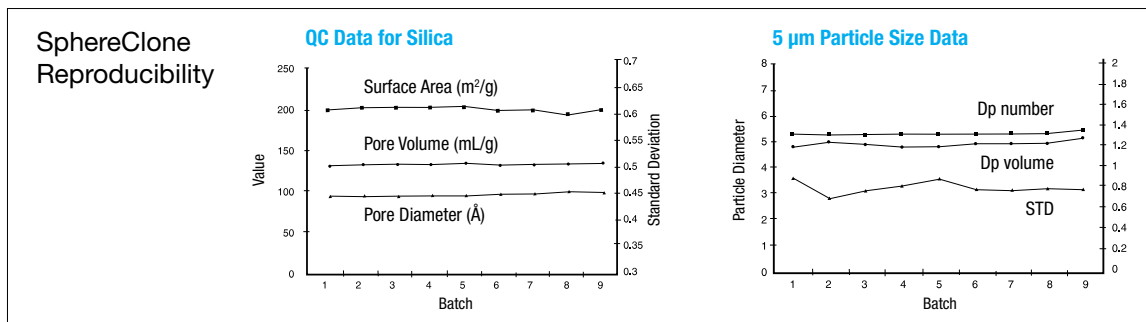
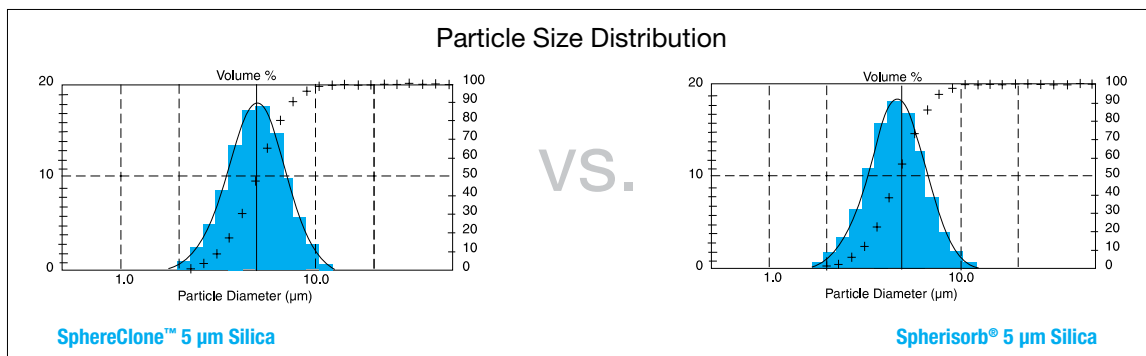
If SphereClone does not provide at least an equivalent separation as compared to Spherisorb columns of the same phase, particle size and comparable dimensions, send in your comparative data within 45 days and keep the SphereClone column for FREE.

### SphereClone™

VS.

### Spherisorb®†

SEM of Base Silica		Material Characteristics		SEM of Base Silica	
	Surface 15,000x Magnification	<b>SphereClone™</b>	<b>vs.</b>	<b>Spherisorb®†</b>	
	Physical Mass Distribution & Shape 4,000x Magnification	3, 5, 10 µm	<b>Particle Size</b>	3, 5, 10 µm	
		80 Å	<b>Pore Size</b>	80 Å	
		200 m <sup>2</sup> /g	<b>Surface Area</b>	200 m <sup>2</sup> /g	
		—	<b>Carbon Load</b>	—	
		6 %	Silica	6 %	
		6 %	C6	6 %	
		6 %	C8	6 %	
		7 %	ODS(1)	7 %	
		12 %	ODS(2)	12 %	
		2 %	NH <sub>2</sub>	2 %	
		3.0 %	Phenyl	3.0 %	
		—	SCX	—	
					Surface 15,000x Magnification
					Physical Mass Distribution & Shape 4,000x Magnification

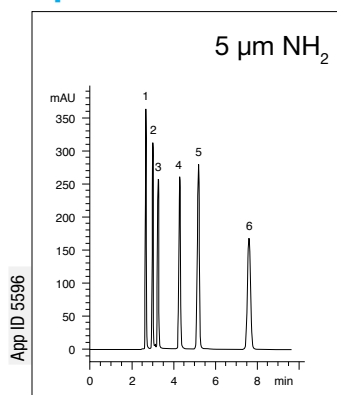


# SPHERECLONE™

HPLC

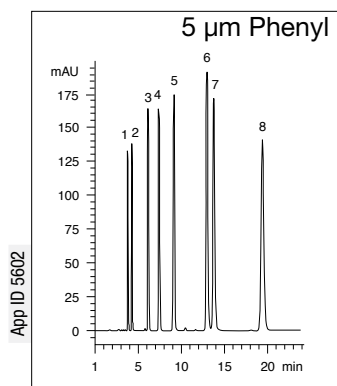
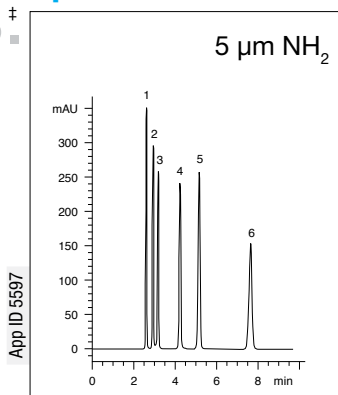
SphereClone

## SphereClone™

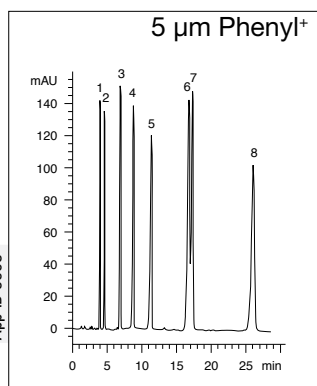


VS. †

## Spherisorb®†



VS. †



### Corticosteroids

**Dimensions:** 250 x 4.6 mm  
**Mobile Phase:** Dichloromethane/Methanol (95:5)  
**Flow Rate:** 1.0 mL/min  
**Detection:** UV @ 254 nm  
**Sample:** 1. Deoxycorticosterone Acetate  
 2. Deoxycorticosterone  
 3. Hydrocortisone 21-Acetate  
 4. Corticosterone  
 5. Cortisone  
 6. Hydrocortisone

### Aromatic Ketones

**Dimensions:** 250 x 4.6 mm  
**Mobile Phase:** Acetonitrile/Water (33:67)  
**Flow Rate:** 1.0 mL/min  
**Detection:** UV @ 254 nm  
**Sample:** 1. Benzamide  
 2. Benzyl Alcohol  
 3. Acetophenone  
 4. Methyl Benzoate  
 5. Phenetole  
 6. Naphthalene  
 7. Benzophenone  
 8. Biphenyl

### ORDERING INFORMATION

SecurityGuard™ Analytical Cartridges require universal holder Part No.: KJO-4282

Phases	3 µm Columns (mm)						SecurityGuard™ Cartridges				
	150 x 1.0	100 x 2.0	150 x 2.0	100 x 3.2	150 x 3.2	100 x 4.6	150 x 4.6	4 x 2.0 mm* /10pk	4 x 3.0 mm* /10pk		
Silica	—	—	—	—	—	—	—	00D-4130-E0	00F-4130-E0	AJO-4347	AJO-4348
C8	—	—	—	00D-4133-R0	—	—	—	00D-4133-E0	—	AJO-4289	AJO-4290
ODS (1)	—	00D-4134-B0	00F-4134-B0	—	00F-4134-R0	00D-4134-E0	00F-4134-E0	00D-4134-E0	00F-4134-E0	AJO-4286	AJO-4287
ODS(2)	00F-4135-A0	00D-4135-B0	00F-4135-B0	—	00F-4135-R0	00D-4135-E0	00F-4135-E0	00D-4135-E0	00F-4135-E0	AJO-4286	AJO-4287
NH <sub>2</sub>	—	—	—	—	00F-4137-R0	—	00F-4137-E0	00D-4137-E0	00F-4137-E0	AJO-4301	AJO-4302
Phenyl	—	—	—	—	—	00D-4138-E0	00F-4138-E0	00D-4138-E0	00F-4138-E0	AJO-4350	AJO-4351

for ID: 2.0-3.0 mm 3.2-8.0 mm

Phases	5 µm Columns (mm)							SecurityGuard™ Cartridges		
	250 x 2.0	150 x 3.2	250 x 3.2	150 x 4.6	250 x 4.6	250 x 10.0	250 x 21.2	4 x 3.0 mm* /10pk	10 x 10 mm †15 x 21.2 mm** /3pk	18-30 mm** /ea
Silica	00G-4139-B0	—	—	00F-4139-E0	00G-4139-E0	—	—	AJO-4348	AJO-7223	AJO-7229
C6	—	—	—	00F-4141-E0	00G-4141-E0	00G-4141-N0	—	—	—	—
C8	00G-4142-B0	00F-4142-R0	00G-4142-R0	00F-4142-E0	00G-4142-E0	00G-4142-N0	—	AJO-4290	AJO-7222	AJO-7840
ODS (1)	00G-4143-B0	00F-4143-R0	00G-4143-R0	00F-4143-E0	00G-4143-E0	00G-4143-N0	—	AJO-4287	AJO-7221	AJO-7839
ODS (2)	00G-4144-B0	00F-4144-R0	00G-4144-R0	00F-4144-E0	00G-4144-E0	00G-4144-N0	00G-4144-P0	AJO-4287	AJO-7221	AJO-7839
NH <sub>2</sub>	—	—	00G-4147-R0	00F-4147-E0	00G-4147-E0	00G-4147-N0	—	AJO-4302	AJO-7364	AJO-8162
Phenyl	—	—	—	00F-4148-E0	00G-4148-E0	—	—	AJO-4351	AJO-7314	AJO-7841
SAX	00G-4149-B0	00F-4149-R0	00G-4149-R0	00F-4149-E0	00G-4149-E0	00G-4149-N0	—	AJO-4311	AJO-7370	—

for ID: 3.2-8.0 mm 9-16 mm 18-30 mm

Phases	10 µm Columns (mm)		SecurityGuard™ Cartridges	
	250 x 4.6		4 x 3.0 mm* /10pk	
C8	00G-4154-E0	—	AJO-4290	—
ODS (1)	00G-4155-E0	—	AJO-4287	—
ODS (2)	00G-4156-E0	—	AJO-4287	—
SAX	00G-4160-E0	—	AJO-4311	—

for ID: 3.2-8.0 mm

\*SecurityGuard™ Analytical Cartridges require holder, Part No.: KJO-4282

†Semi-prep SecurityGuard™ Cartridges require holder, Part No.: AJO-7220

\*\*PREP SecurityGuard™ Cartridges require holder, Part No.: AJO-8223

† Comparative separations may not be representative of all applications. SphereClone™ is a trademark of Phenomenex. Phenomenex is a registered trademark.

† Spherisorb columns used for comparison studies were purchased from manufacturer.

† Spherisorb is a registered trademark of Waters. Phenomenex has no affiliation with Waters.



See p. 218 for SecurityGuard Cartridge Holders