

Agilent Polaris Column Specifications and Options

Polaris C18-A and C8-A

Polaris C18-A and Polaris C8-A columns offer alternate selectivities for general polar applications and are designed with hydrogen-bond-accepting endcapping.

Particle Size (µm)	Length (mm)	ID	Specifications	Method Development Notes	Working with LC/MS
3 µm	30 - 250	2.0	Endcapped	Start with 5% methanol or acetonitrile in water as the initial solvent, and 100% methanol or acetonitrile as the final solvent. We recommend adding 0.1% formic acid in both A and B bottles. This column can be used with 100% aqueous.	If using LC/MS, we recommend starting with 5 - 10 mM ammonium formate, ammonium acetate, ammonium hydroxide, 0.1% acetic acid or 0.1% formic acid. We recommend against using ammonium bicarbonate.
5 µm		3.0	Pore size: 180Å		
10 µm (C18-A only) particle sizes		4.6	Surface area: 200 m ² /g Carbon load: 12.1% (C18-Ether) and 7.1% (C8-Ether)		

Polaris C18-Ether and C8-Ether

Agilent Polaris C18-Ether and C8-Ether columns are endcapped with an ether group to create a more polar surface for selectivity variation. Available in 3 µm and 5 µm particle sizes.

Particle Size (µm)	Length (mm)	ID	Specifications	Method Development Notes	Working with LC/MS
3 µm	30 - 250	2.0	Endcapped	Start with 5% methanol or acetonitrile in water as the initial solvent, and 100% methanol or acetonitrile as the final solvent. We recommend adding 0.1% formic acid in both A and B bottles.	If using LC/MS, we recommend starting with 5 - 10 mM ammonium formate, ammonium acetate, ammonium hydroxide, 0.1% acetic acid or 0.1% formic acid. We recommend against using ammonium bicarbonate.
5 µm		3.0	Pore size: 180Å		
10 µm (C18-A only) particle sizes		4.6	Surface area: 200 m ² /g Carbon load: 12.1% (C18-Ether) and 7.1% (C8-Ether)		

Polaris Amide-C18

Agilent Polaris Amide-C18 columns provide subtle alternative selectivity because they do not have steric protection. They utilize an embedded amide, similar to ZORBAX Bonus-RP columns, and are available in 3 µm and 5 µm particle sizes.

Particle Size (µm)	Length (mm)	ID	Specifications	Method Development Notes	Working with LC/MS
3 µm	30 - 250	2.0	Endcapped	Start with 5% methanol or acetonitrile in water as the initial solvent, and 100% methanol or acetonitrile as the final solvent. We recommend adding 0.1% formic acid in both A and B bottles.	If using LC/MS, we recommend starting with 5 - 10 mM ammonium formate, ammonium acetate, ammonium hydroxide, 0.1% acetic acid or 0.1% formic acid. We recommend against using ammonium bicarbonate.
5 µm		3.0	Pore size: 180Å		
10 µm (C18-A only) particle sizes		4.6	Surface area: 200 m ² /g		

Polaris NH2

Like all Agilent Polaris columns, Polaris NH2 columns are designed for high aqueous conditions. They are created by applying a high phase density bonding to ultra pure silica, and the use of silanol shielding for excellent peak shape.

Particle Size (µm)	Length (mm)	ID	Specifications	Method Development Notes	Working with LC/MS
3 µm	30 - 250	2.0	Endcapped		If using LC/MS, we recommend starting with 5 - 10 mM ammonium formate, ammonium acetate, ammonium hydroxide, 0.1% acetic acid or 0.1% formic acid. We recommend against using ammonium bicarbonate.
5 µm		3.0	Pore size: 180Å		
10 µm (C18-A only) particle sizes		4.6	Surface area: 200 m ² /g		

Polaris Si-A

Agilent Polaris Si-A is a unbonded silica column designed for high aqueous conditions.

Particle Size (µm)	Length (mm)	ID	Specifications	Method Development Notes	Working with LC/MS
3 µm	30 - 250	2.0	Endcapped		If using LC/MS, we recommend starting with 5 - 10 mM ammonium formate, ammonium acetate, ammonium hydroxide, 0.1% acetic acid or 0.1% formic acid. We recommend against using ammonium bicarbonate.
5 µm		3.0	Pore size: 180Å		
10 µm (C18-A only) particle sizes		4.6	Surface area: 200 m ² /g		