

# Your alternative to Macherey-Nagel HPLC columns

The versatile and powerful VDSpher® phases allow for numerous applications in normal and reversed phase as well as HILIC chromatography. Our wide range of phases offers excellent alternatives to NUCLEOSIL and NUCLEODUR. Our recommendations are listed in the following tables. If you don't find the required phase on this list, please contact us to find a similar or alternative product from the wide range of VDSpher® phases.

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# 1. Alternatives to NUCLEOSIL $C_{18}$ , $C_{18}$ AB and $C_{18}$ HD

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEOSIL	replacement recommendation	comments
NUCLEOSIL 50-5 C <sub>18</sub> ec	VDSpher <sup>®</sup> 75 C18-E, 5μm	
NUCLEOSIL 100-3 C <sub>18</sub>	VDSpher <sup>®</sup> PUR 100 C18-E, 3μm	
NUCLEOSIL 100-5 C <sub>18</sub>	VDSpher <sup>®</sup> 100 C18-E, 5μm	
NUCLEOSIL 100-7 C <sub>18</sub>	VDSpher <sup>®</sup> PUR 100 C18-E, 7μm	
NUCLEOSIL 100-10 C <sub>18</sub>	VDSpher <sup>®</sup> 100 C18-E, 10μm	
NUCLEOSIL 120-5 C <sub>18</sub>	VDSpher <sup>®</sup> 150 C18-E, 5μm	
NUCLEOSIL 300-5 C <sub>18</sub>	VDSpher <sup>®</sup> OptiBio 300 C18-E, 5μm	
NUCLEOSIL 100-5 C <sub>18</sub> AB	VDSpher <sup>®</sup> 100 C18-M-SE, 5μm	
NUCLEOSIL 100-5 C <sub>18</sub> HD	VDSpher <sup>®</sup> 100 C18-SE, 5μm	

# 2. Alternatives to NUCLEOSIL $C_4$ and $C_6H_5$

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEOSIL	replacement recommendation	comments
NUCLEOSIL 120-5 C₄	VDSpher <sup>®</sup> 100 C4-E, 5μm	higher surface area and higher carbon load → longer retention expected
NUCLEOSIL 300-5 C₄	VDSpher <sup>®</sup> OptiBio 300 C4-E, 5μm	
NUCLEOSIL 100-5 C <sub>6</sub> H <sub>5</sub>	VDSpher <sup>®</sup> 100 Phenyl-E, 5μm	endcapped higher surface area and higher carbon load → longer retention expected

#### 3. Alternatives to NUCLEOSIL C<sub>8</sub>

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEOSIL	replacement recommendation	comments
NUCLEOSIL 100-5 C <sub>8</sub> ec	VDSpher <sup>®</sup> 100 C8-E, 5μm	
NUCLEOSIL 100-5 C <sub>8</sub>	VDSpher <sup>®</sup> PUR 100 C8-NE, 5μm	
NUCLEOSIL 100-7 C <sub>8</sub>	VDSpher <sup>®</sup> PUR 100 C8-E, 7μm	endcapped
NUCLEOSIL 100-10 C <sub>8</sub>	VDSpher <sup>®</sup> 100 C8-E, 10μm	endcapped
NUCLEOSIL 120-3 C <sub>8</sub>	VDSpher <sup>®</sup> PUR 100 C8-E, 3μm	endcapped higher surface area and higher carbon load → longer retention expected
NUCLEOSIL 120-5 C <sub>8</sub>	VDSpher <sup>®</sup> PUR 100 C8-NE, 5μm	higher surface area and higher carbon load → longer retention expected
NUCLEOSIL 300-5 C <sub>8</sub>	VDSpher <sup>®</sup> OptiBio PUR 300 C8-E, 5μm	endcapped
NUCLEOSIL 100-5 C <sub>8</sub> HD	VDSpher <sup>®</sup> 100 C8-SE, 5μm	

#### 4. Alternatives to NUCLEOSIL OH and silica

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEOSIL	replacement recommendation	comments
NUCLEOSIL 100-5 OH	VDSpher <sup>®</sup> 100 Diol, 5μm	
NUCLEOSIL 50-5	VDSpher <sup>®</sup> 75 SIL, 5μm	
NUCLEOSIL 100-5	VDSpher <sup>®</sup> 100 SIL, 5μm	

# 5. Alternatives to NUCLEOSIL CN and NH<sub>2</sub>

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEOSIL	replacement recommendation	comments
NUCLEOSIL 100-5 CN	VDSpher <sup>®</sup> 100 CN, 5μm	endcapped
NUCLEOSIL 100-5 CN-RP	VDSpher <sup>®</sup> 100 CN-RP, 5μm	endcapped
NUCLEOSIL 100-10 CN	VDSpher <sup>®</sup> 100 CN, 10μm	endcapped
NUCLEOSIL 100-3 NH₂	VDSpher <sup>®</sup> PUR 100 NH <sub>2</sub> , 3μm	
NUCLEOSIL 100-5 NH <sub>2</sub> -RP	VDSpher <sup>®</sup> 100 NH <sub>2</sub> , 5μm	equilibration with RP solvents required
NUCLEOSIL 100-5 NH <sub>2</sub>	VDSpher <sup>®</sup> 100 NH <sub>2</sub> , 5μm	
NUCLEOSIL 100-10 NH <sub>2</sub>	VDSpher <sup>®</sup> 100 NH <sub>2</sub> , 10μm	

# 6. Alternatives to NUCLEODUR C<sub>18</sub>

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEODUR	replacement recommendation	comments
NUCLEODUR 100-3 C <sub>18</sub> ec	VDSpher <sup>®</sup> PUR 100 C18-E, 3µm	use only in range of pH = 2 to 7.5
NUCLEODUR 100-5 C <sub>18</sub> ec	VDSpher <sup>®</sup> PUR 100 C18-E, 5µm	use only in range of pH = 2 to 7.5
NUCLEODUR 100-10 C <sub>18</sub> ec	VDSpher <sup>®</sup> PUR 100 C18-E, 10μm	use only in range of pH = 2 to 7.5
NUCLEODUR 300-5 C <sub>18</sub> ec	VDSpher <sup>®</sup> OptiBio PUR 300 C18-E, 5μm	use only in range of pH = 2 to 7.5
NUCLEODUR 100-30 C <sub>18</sub> ec	VDSpher <sup>®</sup> Flash 100 C18-E, 30μm	use only in range of pH = 2 to 7.5
NUCLEODUR 100-50 C <sub>18</sub> ec	VDSpher <sup>®</sup> Flash 100 C18-E, 55μm	use only in range of pH = 2 to 7.5

## 7. Alternatives to NUCLEODUR C<sub>18</sub> Gravity

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEODUR	replacement recommendation	comments
NUCLEODUR C <sub>18</sub> Gravity, 1.8μm	U-VDSpher <sup>®</sup> PUR 100 C18-E, 1.8μm	use only in range of pH = 2 to 7.5
NUCLEODUR C <sub>18</sub> Gravity, 3μm	VDSpher <sup>®</sup> PUR 100 C18-SE, 3μm	use only in range of pH = 2 to 9
NUCLEODUR C <sub>18</sub> Gravity, 5μm	VDSpher <sup>®</sup> PUR 100 C18-SE, 5μm	use only in range of pH = 2 to 9
NUCLEODUR C <sub>18</sub> Gravity, 10μm	VDSpher <sup>®</sup> PUR 100 C18-SE, 10μm	use only in range of pH = 2 to 9

#### 8. Alternatives to NUCLEODUR C<sub>18</sub> Isis

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEODUR	replacement recommendation	comments
NUCLEODUR C <sub>18</sub> Isis, 1.8μm	U-VDSpher <sup>®</sup> PUR 100 C18-M-SE, 1.8μm	use only in range of pH = 2 to 9
NUCLEODUR C <sub>18</sub> Isis, 3μm	VDSpher <sup>®</sup> PUR 100 C18-M-SE, 3μm	use only in range of pH = 2 to 9
NUCLEODUR C <sub>18</sub> Isis, 5μm	VDSpher <sup>®</sup> PUR 100 C18-M-SE, 5μm	use only in range of pH = 2 to 9

# 9. Alternatives to NUCLEODUR C<sub>18</sub> Pyramid

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEODUR	replacement recommendation	comments
NUCLEODUR C <sub>18</sub> Pyramid, 1.8μm	U-VDSpher <sup>®</sup> PUR 100 C18-H, 1.8μm	use only in range of pH = 2 to 7.5 lower carbon load → shorter retention expected
NUCLEODUR C <sub>18</sub> Pyramid, 3μm	VDSpher <sup>®</sup> OptiAqua PUR 100 C18, 3μm	use only in range of pH = 2 to 8
NUCLEODUR C <sub>18</sub> Pyramid, 5μm	VDSpher <sup>®</sup> OptiAqua PUR 100 C18, 5μm	use only in range of pH = 2 to 8

# 10. Alternatives to NUCLEODUR C<sub>18</sub> HTec

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEODUR	replacement recommendation	comments
NUCLEODUR C <sub>18</sub> HTec, 1.8μm	U-VDSpher <sup>®</sup> PUR 100 C18-E, 1.8μm	use only in range of pH = 2 to 7.5
NUCLEODUR C <sub>18</sub> HTec, 3μm	VDSpher <sup>®</sup> PUR 100 C18-SE, 3μm	use only in range of pH = 2 to 9
NUCLEODUR C <sub>18</sub> HTec, 5μm	VDSpher <sup>®</sup> PUR 100 C18-SE, 5μm	use only in range of pH = 2 to 9
NUCLEODUR C <sub>18</sub> HTec, 10μm	VDSpher <sup>®</sup> PUR 100 C18-SE, 10μm	use only in range of pH = 2 to 9

## 11. Alternatives to NUCLEODUR C<sub>8</sub> and C<sub>8</sub> Gravity

Macherey-Nagel	VDSpher <sup>®</sup>	
NUCLEODUR	replacement recommendation	comments
NUCLEODUR 100-3 C <sub>8</sub> ec	VDSpher <sup>®</sup> PUR 100 C8-E, 3μm	use only in range of pH = 2 to 7.5
NUCLEODUR 100-5 C <sub>8</sub> ec	VDSpher <sup>®</sup> PUR 100 C8-E, 5μm	use only in range of pH = 2 to 7.5
NUCLEODUR 100-7 C <sub>8</sub> ec	VDSpher <sup>®</sup> PUR 100 C8-E, 7μm	use only in range of pH = 2 to 7.5
NUCLEODUR 100-10 C <sub>8</sub> ec	VDSpher <sup>®</sup> PUR 100 C8-E, 10μm	use only in range of pH = 2 to 7.5
NUCLEODUR C <sub>8</sub> Gravity, 1.8μm	U-VDSpher <sup>®</sup> PUR 100 C8-E, 1.8μm	use only in range of pH = 2 to 7.5
NUCLEODUR C <sub>8</sub> Gravity, 5μm	VDSpher <sup>®</sup> PUR 100 C8-SE, 5µm	use only in range of pH = 2 to 9
NUCLEODUR C <sub>8</sub> Gravity, 10μm	VDSpher <sup>®</sup> PUR 100 C8-E, 10μm	use only in range of pH = 2 to 7.5

## 12. Alternatives to NUCLEODUR C4 and Phenyl-Hexyl

Macherey-Nagel	VDSpher <sup>®</sup>		
NUCLEODUR	replacement recommendation	comments	
NUCLEODUR 300-5 C <sub>4</sub> ec	VDSpher <sup>®</sup> OptiBio PUR 100 C4-E, 5μm	use only in range of pH = 2 to 7.5	
NUCLEODUR Phenyl-Hexyl, 3μm	VDSpher <sup>®</sup> PUR 100 Phenyl-B, 3μm	use only in range of pH = 2 to 7.5	
NUCLEODUR Phenyl-Hexyl, 5μm	VDSpher <sup>®</sup> PUR 100 Phenyl-B, 5μm	use only in range of pH = 2 to 7.5	

#### 13. Alternatives to NUCLEODUR HILIC and silica

Macherey-Nagel	VDSpher <sup>®</sup>		
NUCLEODUR	replacement recommendation	comments	
NUCLEODUR HILIC	VDSpher <sup>®</sup> PUR 100 HILIC-Z, 5μm		
NUCLEODUR 100-3	VDSpher <sup>®</sup> PUR 100 SIL, 3μm		
NUCLEODUR 100-5	VDSpher <sup>®</sup> PUR 100 SIL, 5μm		
NUCLEODUR 100-10	VDSpher <sup>®</sup> PUR 100 SIL, 10μm		
NUCLEODUR 100-30	VDSpher <sup>®</sup> Flash 100 SIL, 30μm		
NUCLEODUR 100-50	VDSpher <sup>®</sup> Flash 100 SIL, 55μm		

#### 14. Alternatives to NUCLEODUR CN and NH<sub>2</sub>

Macherey-Nagel	VDSpher <sup>®</sup>		
NUCLEODUR	replacement recommendation	comments	
NUCLEODUR 100-5 CN-RP	VDSpher <sup>®</sup> PUR 100 CN-RP, 5μm	use only in range of pH = 2 to 8	
NUCLEODUR 100-5 CN	VDSpher <sup>®</sup> PUR 100 CN, 5μm	use only in range of pH = 2 to 8	
NUCLEODUR 100-3 NH₂-RP	VDSpher <sup>®</sup> PUR 100 NH <sub>2</sub> , 3μm	equilibration with RP solvents required	
NUCLEODUR 100-5 NH₂-RP	VDSpher <sup>®</sup> PUR 100 NH <sub>2</sub> , 5μm	equilibration with RP solvents required	
NUCLEODUR 100-5 NH₂	VDSpher <sup>®</sup> PUR 100 NH <sub>2</sub> , 5μm		

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