

## ENDURUS<sup>®</sup> HPLC & UHPLC COLUMNS



“QUALITY OF CONTINUING FOR A LONG TIME”

ENDURUS® HPLC PHASE SPECIFICATIONS -100Å								
Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18 -Classic	100	1.7, 2, 3, 4, 5, 10	330	18	Yes	2 - 8	Yes (95%)	L1
C18 - HP	100	1.7, 2, 3, 4, 5, 10	330	18	Double Endcapped	2 - 9*	Yes (70%)	L1
C18 - Polar	100	1.7, 2, 3, 5, 10	330	18	Yes Proprietary	2 - 8	100%	L1
C18 - EPS	100	1.7, 2, 3, 5, 10	330	14	Yes Proprietary	2 - 8	100%	L1
C18 - EPS HP	100	1.7, 2, 3, 5, 10	330	14	Double Endcapped	1.5 - 9*	Yes (70%)	L1
C18 - AQ	100	1.7, 2, 3, 5, 10	330	11	Yes	2 - 8	100%	L1
C18 - TAC (Tri Alpha Classic)	100	1.7, 2, 3, 5, 10	330	19	Yes	2 - 8	Yes	L1
C18 - TAHP (Tri Alpha HP)	100	1.7, 2, 3, 5, 10	330	19	Double Endcapped	1.5 - 10*	Yes	L1
C18 - TAP (Tri Alpha Polar)	100	1.7, 2, 3, 5, 10	330	19	Yes Proprietary	3 - 7	100%	L1
C8 Classic	100	2, 3, 5, 7, 10	330	11	Yes	2 - 8	Yes	L7
C8 - HL	100	2, 3, 5, 10	330	13	Double Endcapped	2 - 9*	Yes (70%)	L7
C8 - AQ	100	2, 3, 5, 10	330	10	Yes	3 - 8	100%	L7
C8 - EPS	100	2, 3, 5, 10	330	9	Yes	2 - 8	100%	L7
C8 - Polar	100	2, 3, 5, 10	330	12	Yes	2 - 8	100%	L7
C8 - TAHP	100	2, 3, 5, 10	330	14	Double Endcapped	1.5 - 9*	Yes (70%)	L7
C4 Classic	100	3, 5	330	8	Yes	2 - 8	Yes	L26
C4 HP	100	3, 5	330	8	Double Endcapped	1.5 - 9*	Yes (70%)	L26
Phenyl	100	2, 3, 5, 10	330	12	Yes	2 - 8	-	L11
Phenyl hexyl - Classic	100	3, 5	330	14	Yes	2 - 8	-	L11
Phenyl hexyl HP	100	3, 5	330	15	Double Endcapped	1.5 - 9*	-	L11
Bi Phenyl	100	2, 3, 5	330	16	Yes	2 - 8	Yes	L11
Cyano RP	100	3, 5, 10	330	7	Yes	2 - 8	-	L10
Amino - RP	100	3, 5, 10	330	3	No	2 - 8	-	L8
Amino HP	100	3, 5, 10	330	5	Yes Proprietary	2 - 9*	-	L8
Amino DA	100	3, 5, 10	330	6	Yes Proprietary	2 - 8	-	L8
Amino -NE	100	5, 10	330	4	NO	2 - 8	-	L8
HILIC	100	3, 5	330	9	No	2 - 8	Only upto 30%	L3
Silica	100	3, 5	330	-	No	2 - 8	-	L3
C30	100	5	330	19	Yes	2 - 8	-	L3
Diol	100	3, 5, 10	330	4	No	2 - 8	Yes	L20
Select RP	100	3, 5	330	14	Yes	2 - 8	Yes	L42
RP - F5	100	3, 5	330	16	Yes	2 - 8	Yes	L1

\* For optimum column lifetime, a pH range of 2 - 8 is recommended. To increase column lifetime at high pH, organic buffers, low buffer concentrations, high % organic solvent and low temperatures must be considered.

## ENDURUS<sup>®</sup> WIDE PORE (WP)



“QUALITY OF CONTINUING FOR A LONG TIME”

**ENDURUS® WIDE PORE HPLC PHASE SPECIFICATIONS -135Å**

Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18-WP Classic	135	3,5	190	12	Yes	2 to 8	Yes (95%)	L1
HP C18-WP	135	3,5	190	12	Double Endcapped	1.5 to 9*	Yes	L1
C18-EPS-WP	135	3,5	190	10	Yes Proprietary	2 to 8	Yes	L1
C18-TAC-WP (Tri Alpha Classic)	135	3,5	190	14	Yes	2 to 8	Yes	L1
C18-TAHP-WP (Tri Alpha HP)	135	3,5	190	16	Double Endcapped	1.5 to 9*	Yes	L1
C18-TAP-WP (Tri Alpha Polar)	135	3,5	190	16	Yes Proprietary	3 to 7	100%	L1
C8 -WP Classic	135	3,5	190	8	Yes	2 to 8	Yes	L7
C8-TAHP-WP (Tri Alpha HP)	135	3,5	190	10	Double Endcapped	1.5 to 9*	Yes	L7
C8-TAP-WP (Tri Alpha Polar)	135	3,5	190	10	Yes Proprietary	1.5 to 9	Yes	L7
C4 WP	135	3,5	190	3	Yes	2 to 8	Yes	L26
Phenyl-WP	135	3,5	190	4	Yes	2 to 8	-	L11
Amino PYC - WP	135	3,5	190	7	Yes Proprietary	2 to 8	-	L8

**ENDURUS® WIDE PORE HPLC PHASE SPECIFICATIONS -135Å [ULTRA INERT]**

Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
HP C18-WP UI	135	3,5	190	12	Double Endcapped	1.5 to 9*	Yes	L1
C18-EPS-WP UI	135	3,5	190	10	Yes Proprietary	2 to 8	Yes	L1
C18-TAHP-WP UI	135	3,5	190	16	Double Endcapped	1.5 to 9*	Yes	L1
C8-TAHP-WP UI	135	3,5	190	10	Double Endcapped	1.5 to 9*	Yes	L7
C8-TAP-WP UI	135	3,5	190	10	Double Endcapped	1.5 to 9*	Yes	L7
C4 WP UI	135	3,5	190	3	Yes	2 to 8	Yes	L26
Phenyl-WP UI	135	3,5	190	4	Yes	2 to 8	-	L11

\* For optimum column lifetime, a pH range of 2 - 8 is recommended. To increase column lifetime at high pH, organic buffers, low buffer concentrations, high % organic solvent and low temperatures must be considered.

UI - Ultra Inert

WP - Wide Pore [135 Å]

**Related Products**
**FORCE SHIELD COLUMN**

*Reduce Noise, Enhance Sensitivity*



- ▶ Eliminate baseline noise.
- ▶ Boost sensitivity.
- ▶ Protect your column.



**FORCE**  
SCIENTIFIC  
*Science Simplified*



**SAPPHIRUS**<sup>®</sup>  
Suitability, Strength, Stability,

# SAPPHIRUS<sup>®</sup>

## HPLC COLUMNS

**Strength | Stability | Suitability**



### Excellent Strength

- Ultra high purity silica with completely spherical, totally porous particle.
- Well controlled narrow particle size distribution.

### Outstanding Stability

- High bonding density.
- Minimal silanol activity due to new proprietary end capping technology.

### Superior Loadability and Surface Area Accessibility.

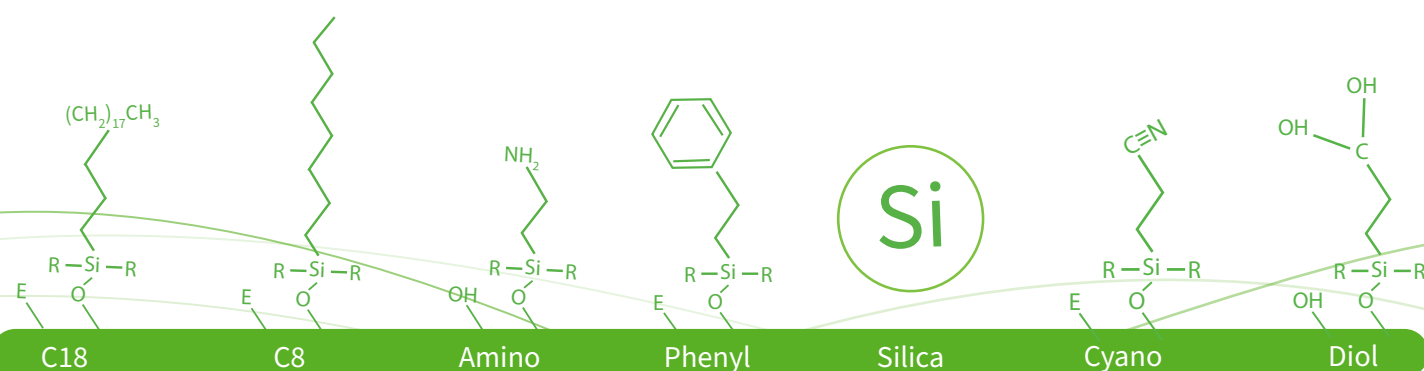
- Optimized particle surface area, pore volume, pore diameter and its distribution to give good surface morphology.

#### SAPPHIRUS® HPLC PHASE SPECIFICATIONS - 100Å

Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18 -Classic	100	3,5,7,10	330	18	Yes	2 to 8	Yes (95%)	L1
C18-HD	100	3,5,10	330	18	Yes	2 to 9	Yes (70%)	L1
C18-Dual	100	3,5,10	330	14	Yes	2 to 8	Yes (100%)	L1
C18-Plus	100	3,5,10	330	19	Yes	2 to 8	Yes	L1
C8-Classic	100	3,5,10	330	10	Yes	2 to 8	Yes	L7
C8-HD	100	3,5,10	330	12	Yes	2 to 9	Yes (70%)	L7
Phenyl-Classic	100	3,5,10	330	12	Yes	2 to 8	Yes	L11
CN-Classic	100	3,5,10	330	7	Yes	2 to 8	Yes	L10
DIOL-Classic	100	3,5,10	330	4	No	2 to 8	Yes	L20
Silica	100	3,5,10	330	N/A	No	2 to 8	No	L3

#### SAPPHIRUS® HPLC PHASE SPECIFICATIONS - 100Å

Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18 BDS	145	3,5	185	11	Yes	2 to 8	Yes	L1
C8 BDS	145	3,5	185	7	Yes	2 to 8	Yes	L7
ODS	145	3,5	185	10	Yes	2 to 8	Yes	L1





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SCIENTIFIC  
*Science Simplified*

**Qualitas™**

# Qualitas

*Enhancing Peaks, Enriching Quality, Elevating Resolution*

Better pH Stability

Ultra High Purity Silica

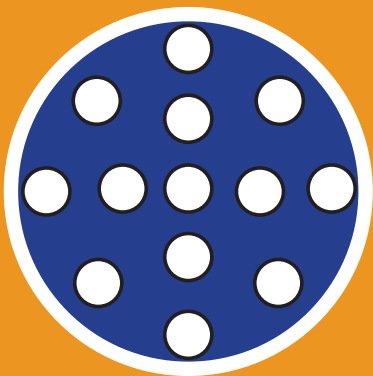
Reproducible separations

Individually tested columns

High Surface Area 480 m<sup>2</sup>/g

Batch to Batch Reproducibility

High Quality at Exceptional Value

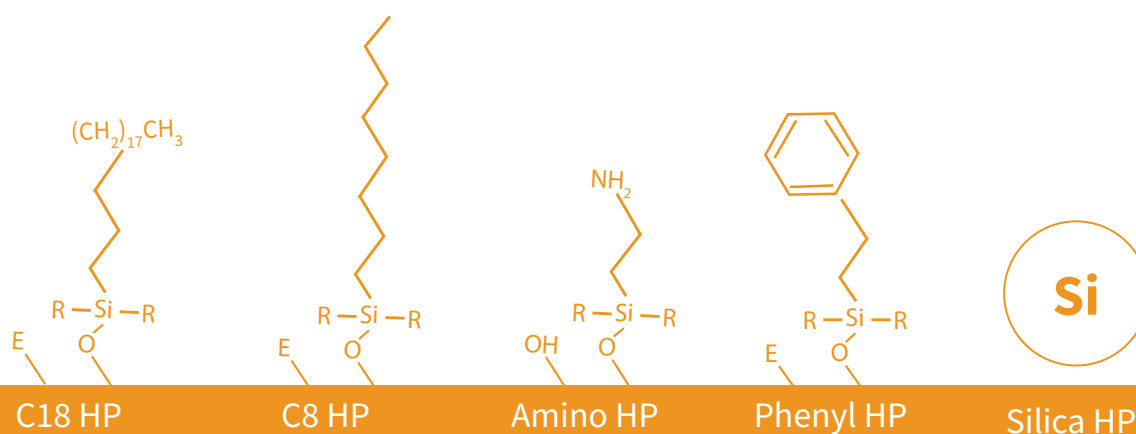


**SURFACE  
AREA 480m<sup>2</sup>/g**

## QUALITAS™ HPLC PHASE SPECIFICATIONS - 100Å

Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
Qualitas™ C18 - HP	100	3,5	480	18	Double Endcapped	2 - 9*	Yes (95%)	L1
Qualitas™ C8 - HP	100	3,5	480	14	Double Endcapped	2 - 9*	Yes	L1
Qualitas™ Phenyl - HP	100	3,5	480	13	Yes Proprietary	2 - 9*	Yes (100%)	L1
Qualitas™ Amino - HP	100	3,5	480	7	Yes Proprietary	2 - 9*	Yes	L1
Qualitas™ Silica - HP	100	3,5	480	-	No	2 - 9*	Yes	L7

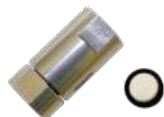
\* For optimum column lifetime, a pH range of 2 - 8 is recommended. To increase column lifetime at high pH, organic buffers, low buffer concentrations, high % organic solvent and low temperatures must be considered.



### Related Products

#### FORCE SHIELD COLUMN

Reduce Noise, Enhance Sensitivity



- ▶ Eliminate baseline noise.
- ▶ Boost sensitivity.
- ▶ Protect your column.

### Related Products

Manufactured from premium quality PEEK, the fittings simply hand tighten to provide a perfect column connection.

- Fingertight to 350 bar (5000 psi)
- Reuseable and simple to install
- Eliminates poor connections
- Compatible with all HPLC column brands and instruments







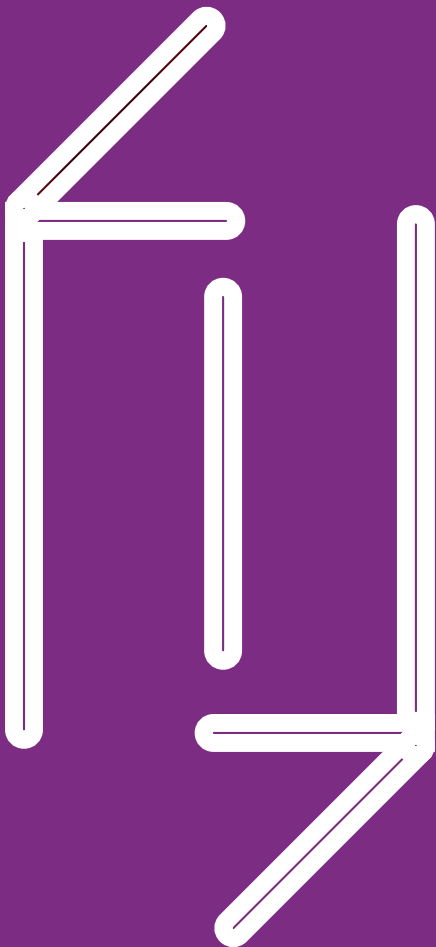
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SCIENTIFIC  
*Science Simplified*



# RUBITAS®

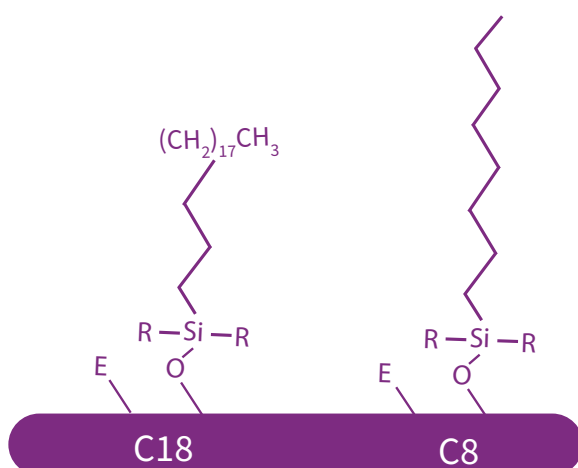
## HPLC COLUMNS

Ultra high purity silica  
Individually tested columns  
Available only in C18 / C8 Phase  
Best in Class price to performance  
Excellent peak shape & reproducibility



# 95Å

RUBITAS® HPLC PHASE SPECIFICATIONS - 95Å								
Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18	95	3,5	330	11	Yes Proprietary	2 - 8	100%	L1
C8	95	3,5	330	6	Yes Proprietary	2 - 8	100%	L7
C18 XM	95	3,5	330	16	Yes	2 - 8	Yes (100%)	L1
C8 XM	95	3,5	330	10	Yes	2 - 8	Yes	L7
Phenyl	95	3,5	330	16	Yes	2 - 8	-	L11



#### Related Products

#### FORCE SHIELD COLUMN

*Reduce Noise, Enhance Sensitivity*



Say goodbye to particle accumulation in your column frit and hello to consistent, high-quality results. Keep your columns performing at their best for longer with our proven technology.

#### Related Products

#### MOBILE PHASE INLET FILTERS

*Your Fluid Handling Expert*



Elevate your solvent filtration experience with our Premium Solvent Suction Filter. Discover the difference today!

*Premium Solvent Suction Filter*

#### Related Products

#### DIRECT-CONNECT GUARD COLUMN

*Reduce Noise, Enhance Sensitivity*



Say goodbye to costly prepacked guard cartridges. Our Analytical Refillable Guard Columns offer a budget-friendly alternative without compromising on performance.



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SCIENTIFIC  
*Science Simplified*



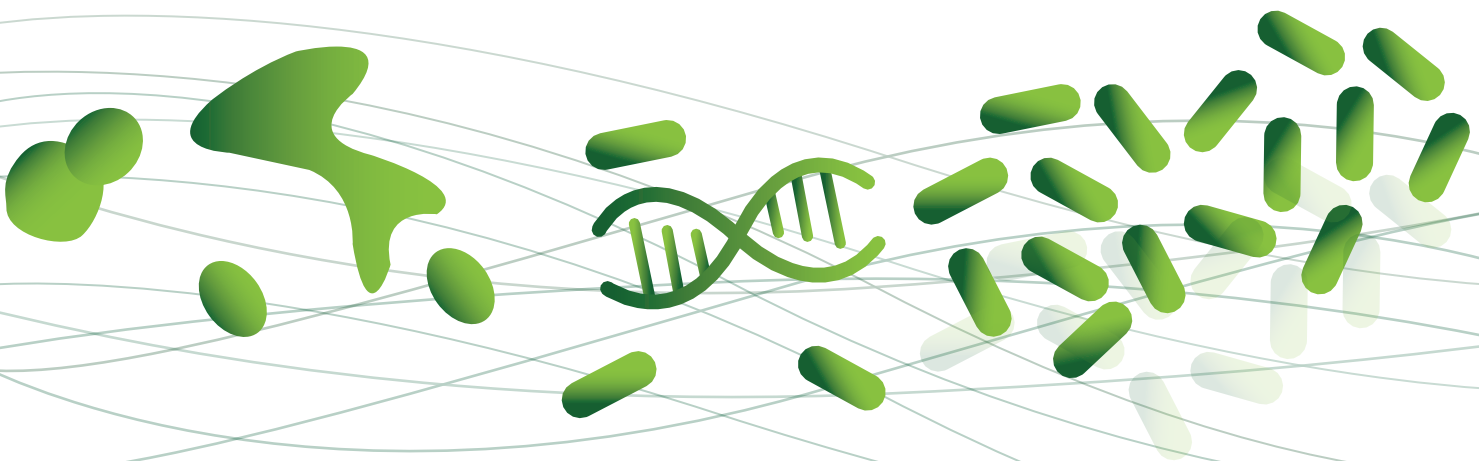
**Aventurus**<sup>®</sup>  
BIO

# Aventurus<sup>®</sup> Bio

5000 - 20000Da Mw

- Eliminating Carryover For Protein And Peptide Molecules
- Specially Treated Large Pore Silica
- Unrivaled Sensitivity For Precise Protein And Peptide Analysis
- Impeccable Peak Symmetry Ensuring Accurate And Reliable Results

**200Å**



### AVENTURUS® BIO HPLC PHASE SPECIFICATIONS - 200Å

Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18-TAHP-XWP (Tri Alpha HP)	200	3,5	150	13	Yes	1.5 to 9	Yes	L1
C18-TAP-XWP (Tri Alpha Polar)	200	3,5	150	13	Yes	3 to 7	100%	L1
C18-EPS-XWP	200	3,5	150	6	Yes	2 to 8	Yes	L1
C8-TAHP-XWP (Tri Alpha HP)	200	3,5	150	6	Yes	1.5 to 9	Yes	L7
C8-TAP-XWP (Tri Alpha Polar)	200	3,5	150	6	Yes	3 to 7	100%	L7
C4-XWP	200	3,5	150	4	Yes	2 to 8	Yes	L26
Phenyl-XWP	200	3,5	150	2.2	Yes	2 to 8	-	L11

### AVENTURUS® BIO HPLC PHASE SPECIFICATIONS - 200Å [ULTRA INERT]

Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18-TAHP-XWP - UI	200	3,5	150	13	Yes	1.5 to 9	Yes	L1
C18-TAP-XWP - UI	200	3,5	150	13	Yes	3 to 7	100%	L1
C18-EPS-XWP - UI	200	3,5	150	6	Yes	2 to 8	Yes	L1
C8-TAHP-XWP - UI	200	3,5	150	6	Yes	1.5 to 9	Yes	L7
C8-TAP-XWP - UI	200	3,5	150	6	Yes	3 to 7	100%	L7
C4-XWP - UI	200	3,5	150	4	Yes	2 to 8	Yes	L26
Phenyl-XWP - UI	200	3,5	150	2.2	Yes	2 to 8	-	L11

\*UI - Ultra Inert  
\*XWP - Extra Wide Pore

#### Ultra inert (UI)

Ultra inert (UI) HPLC columns offer several benefits for chromatography, particularly in the separation of biomolecules like peptides and proteins. The key benefits include increased sensitivity, optimized selectivity, and an expanded pH range. UI columns feature reduced levels of silanol and metal activity, minimizing interference with the separation process. Additionally, methods developed using UI columns tend to be more rugged over time due to the enhanced reproducibility from column to column and lot to lot.

#### Related Products

#### FORCE SHIELD COLUMN

Reduce Noise, Enhance Sensitivity



Say goodbye to particle accumulation in your column frit and hello to consistent, high-quality results. Keep your columns performing at their best for longer with our proven technology.



**FORCE**  
SCIENTIFIC  
*Science Simplified*



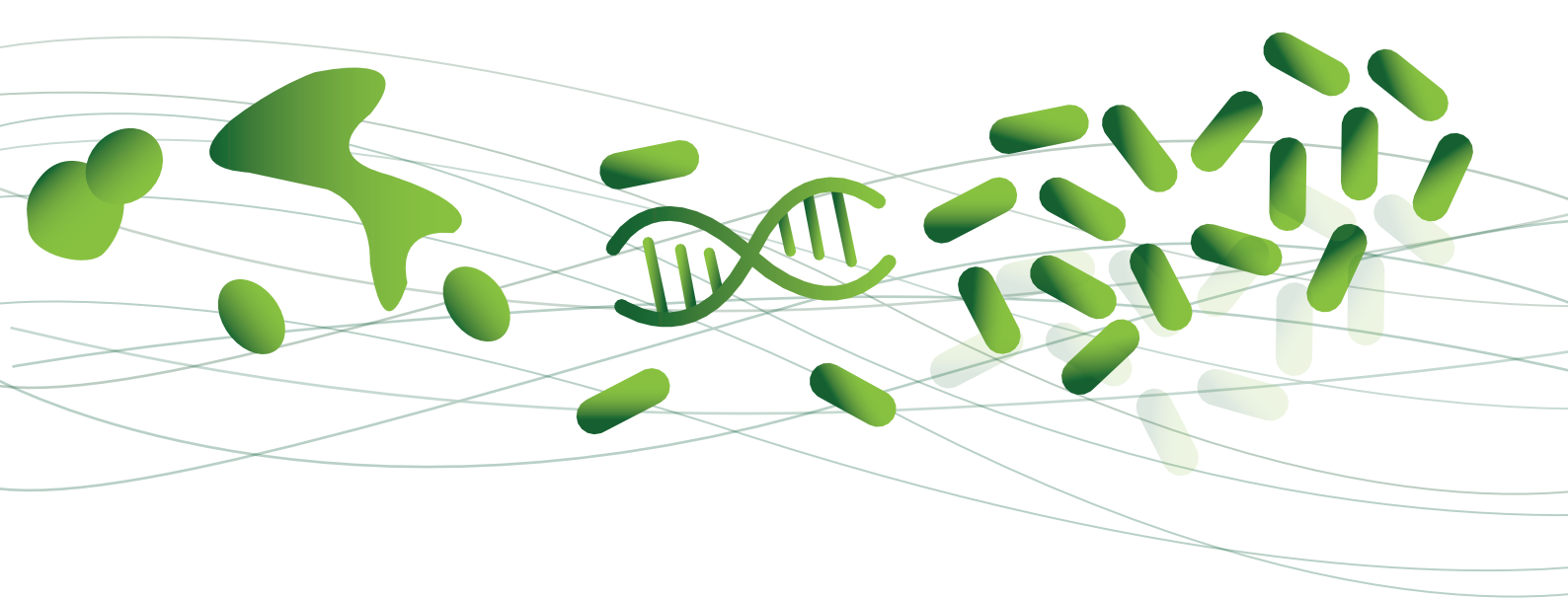
**Aventurus®**  
BIO

# Aventurus® Bio

10000 - 75000Da Mw

- Eliminating Carryover For Protein And Peptide Molecules
- Specially Treated Large Pore Silica
- Unrivalled Sensitivity For Precise Protein And Peptide Analysis
- Impeccable Peak Symmetry Ensuring Accurate And Reliable Results

**300Å**



AVENTURUS® BIO HPLC PHASE SPECIFICATIONS - 300Å								
Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18-TAHP-XXWP (Tri Alpha HP)	300	3,5	110	10	Yes	1.5 to 9	Yes	L1
C18-TAP-XXWP (Tri Alpha Polar)	300	3,5	110	12	Yes	3 to 7	100%	L1
C18-EPS-XXWP	300	3,5	110	5	Yes	2 to 8	Yes	L1
C8-TAHP-XXWP (Tri Alpha HP)	300	3,5	110	6	Yes	1.5 to 9	Yes	L7
C8-TAP-XXWP (Tri Alpha Polar)	300	3,5	110	5	Yes	3 to 7	100%	L7
C4-XXWP	300	3,5	110	3	Yes	2 to 8	Yes	L26
Phenyl-XXWP	300	3,5	110	2	Yes	2 to 8	-	L11

AVENTURUS® BIO HPLC PHASE SPECIFICATIONS - 300Å (ULTRA INERT)								
Phase	Pore Size (Å)	Particle Size (µm)	Surface Area (m <sup>2</sup> /g)	Carbon Load (%)	Endcapped	pH Range	Aq Compatible	USP Listing
C18-TAHP-XXWP - UI	300	3,5	110	10	Yes	1.5 to 9	Yes	L1
C18-TAP-XXWP - UI	300	3,5	110	12	Yes	3 to 7	100%	L1
C18-EPS-XXWP-UI	300	3,5	110	5	Yes	2 to 8	Yes	L1
C8-TAHP-XXWP - UI	300	3,5	110	6	Yes	1.5 to 9	Yes	L7
C8-TAP-XXWP - UI	300	3,5	110	5	Yes	3 to 7	100%	L7
C4-XXWP-UI	300	3,5	110	3	Yes	2 to 8	Yes	L26
Phenyl-XXWP-UI	300	3,5	110	2	Yes	2 to 8	-	L11

\*UI - Ultra Inert  
\*XXWP - 300 Å

#### Ultra inert (UI)

**Ultra inert (UI)** HPLC columns offer several benefits for chromatography, particularly in the separation of biomolecules like peptides and proteins. The key benefits include increased sensitivity, optimized selectivity, and an expanded pH range. UI columns feature reduced levels of silanol and metal activity, minimizing interference with the separation process. Additionally, methods developed using UI columns tend to be more rugged over time due to the enhanced reproducibility from column to column and lot to lot.

#### Related Products

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Reduce Noise, Enhance Sensitivity



Say goodbye to costly prepacked guard cartridges. Our Analytical Refillable Guard Columns offer a budget-friendly alternative without compromising on performance.