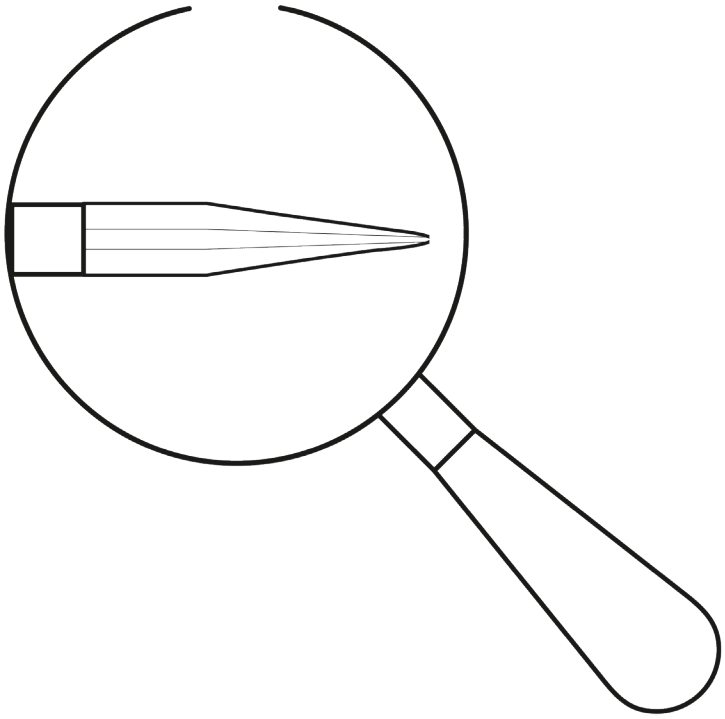
Dr. Maisch

Any Column, Any Size, Any Media

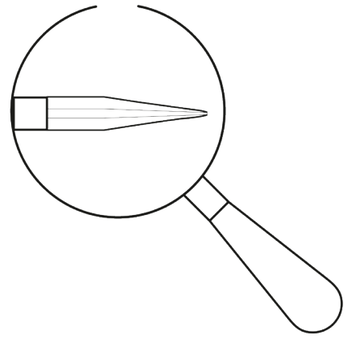


NanoFusion

Bulk Media, Self-Packing & Pre-Packed Capillaries for Proteomics

MADE BY DR. MAISCH

CONTENT



NANOFUSION
MADE BY DR. MAISCH

From one of the biggest
High-**P**erformance **L**iquid **C**hromatography (HPLC) and
Ultra **H**igh-**P**erformance **L**iquid **C**hromatography (UHPLC)
Column Manufacturers in Europe.

INTRODUCTION

Dr. Maisch has been recognized for many years by proteomics scientists for his portfolio of various sub-2 µm silica bulk media, offering excellent performance when packed in capillary columns.

The ReproSil-Pur 120 C18-AQ, 1.9 µm, has become the gold standard in proteomic labs. Widely adopted in laboratories worldwide, this silica has been prominently featured in numerous publications over the years for its exceptional performance and reliability.

As part of his ongoing commitment to advancing analytical workflows for proteomics researchers, Dr. Maisch has developed several innovative packing media over the years. These materials demonstrate remarkable and, in many cases, superior performance when packed into capillary columns.

These media are designed with the following Performance, Packability, Reproducibility (PPR) key criteria in mind.

Performance

Analyzing peptides from a protein digest the highest efficiency is the key to the highest number of identified peptides. The number of identified peptides is closely correlated with efficiency.

Packability

Dr. Maisch offers an extensive range of sub-2 µm C18 silica media, many of which deliver exceptional performance when packed into stainless-steel HPLC columns.

However, some of these media are challenging or even impossible to pack into capillary columns particularly for self-packers with limited time and resources to develop reliable and reproducible packing processes.

Reproducibility

Dr. Maisch oversees the entire process, from silica manufacturing and bonding to end-capping and final batch release, backed by over 10 years of experience in packing of capillary columns.

OPTIMIZING EFFICIENCY

PARTICLE SIZE

Increasing Number of Identified Peptides by Particle Size

The particle size of silica media directly impacts efficiency, as measured by the number of theoretical plates (N), and is also proportional to the number of identified peptides.

Dr. Maisch offers a wide range of particle sizes across his product lines to meet various needs. However, the maximum backpressure of the LC system remains a key limiting factor in selecting the optimal particle size.

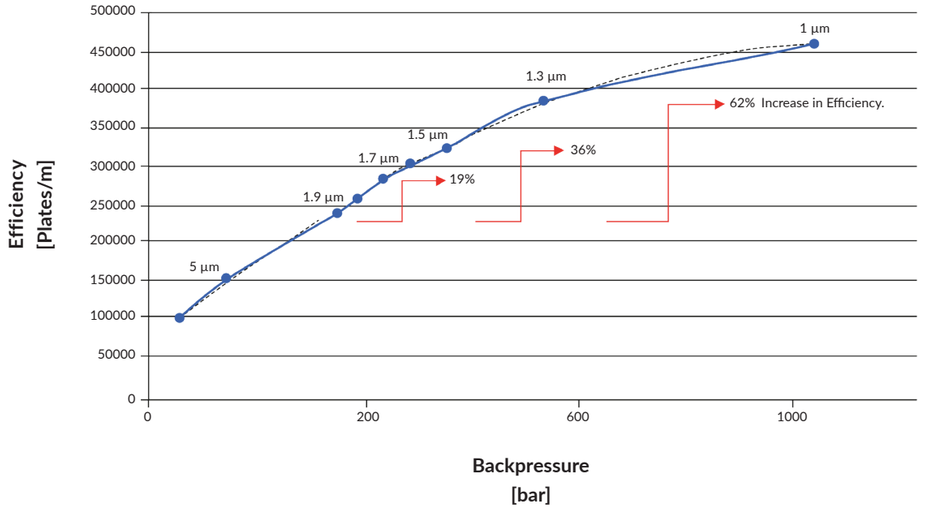


Figure 1: Efficency-Backpressure Relation of Silica Media based on Particle Size.

Increasing Number of Identified Peptides by Particle Size Distribution

Particle size distribution is another factor that may impact HPLC column efficiency. For the purpose of this discussion, the term D90/10 is used to describe this relationship.

$$D90/10 = \frac{d_p \text{ at 90\% of the distribution}}{d_p \text{ at 10\% of the distribution}}$$

D90 refers to the particle size at which 90% of the particles in the distribution are smaller.

D10 refers to the particle size at which 10% of the particles are smaller.

A low D90/10 ratio indicates a narrow particle size distribution, which is generally associated with high HPLC column efficiency, very good resolution, and precise separation.

Through a specialized production process, Dr. Maisch successfully reduced the D90/10 value to < 1.1 for the Exsil Mono product line.

Exsil Mono 100 Si, 1.7 µm

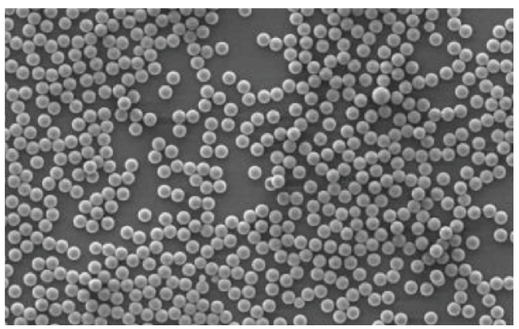


Figure 2: High-Resolution Picture of Exsil Mono 100 Si, 1.7 µm.

Exsil Mono 100 Si, 1.7 µm

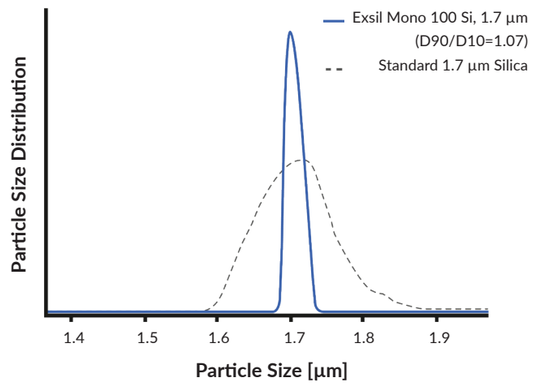


Figure 3: Particle Size Distribution of a Standard 1.7 µm Silica and Exsil Mono 100 Si, 1.7 µm.

Increasing Number of Identified Peptides by Column Length

Dr. Maisch employs a proprietary capillary packing process that utilizes a pressure of 1200 bar and a specialized solvent mixture. This innovative method is:

- Exceptionally fast.
- Highly reproducible.
- Capable of packing capillary columns to maximum length.

Figure 4: Unpacked Capillary Tip.

Figure 5: Packed Capillary Tip.

Figure 6: Packed Capillary Column.

Performance, Packability, Reproducibility (PPR)

Figure 7: Bulk Media ReproSil-Pur 120 C18-AQ, 1.9 µm, ReproSil Saphir 100 C18, 1.5 µm and Exsil Mono 100 C18, 1.5 µm.

Based on extensive testing, ReproSil-Pur 120 C18, 1.9 µm, ReproSil Saphir 100 C18, 1.5 µm and Exsil Mono 100 C18, 1.35 µm, 1.5 µm and 1.7 µm showed the best results in terms of Performance, Packability and Reproducibility (PPR) among the existing sub-2 µm media.

Table 1: Bulk Media - Performance, Packability, Reproducibility (PPR) of ReproSil-Pur 120 C18-AQ, 1.9 µm, ReproSil Saphir 100 C18, 1.5 µm and Exsil Mono 100 C18, 1.35 µm, 1.5 µm and 1.7 µm.

Media	Performance	Packability	Reproducibility
ReproSil-Pur 120 C18-AQ, 1.9 µm	Very Good	Outstanding	Outstanding
ReproSil Saphir 100 C18, 1.5 µm	Excellent	Excellent	Outstanding
Exsil Mono 100 C18, 1.5 µm and 1.7 µm	Outstanding	Very Good	Excellent
Exsil Mono 100 C18, 1.35 µm	Most Outstanding	Very Good	Excellent

Technical Data

Table 2: Technical Data of ReproSil-Pur 120 C18-AQ, 1.9 µm, ReproSil Saphir 100 C18, 1.5 µm and Exsil Mono 100 C18, 1.35 µm, 1.5 µm and 1.7 µm.

Media	Modification	Particle Size [µm]	Pore Size [Å]	Carbon Load [%]	Endcapping	Surface Area [m²/g]	pH Range
ReproSil-Pur 120 C18-AQ	C18-AQ	1.9	120	15	Yes	300	2 to 8
ReproSil Saphir 100 C18	C18	1.5	100	20	Yes	400	2 to 8
Exsil Mono 100 C18	C18	1.35, 1.5 or 1.7	100	17	Yes	350	1 to 9

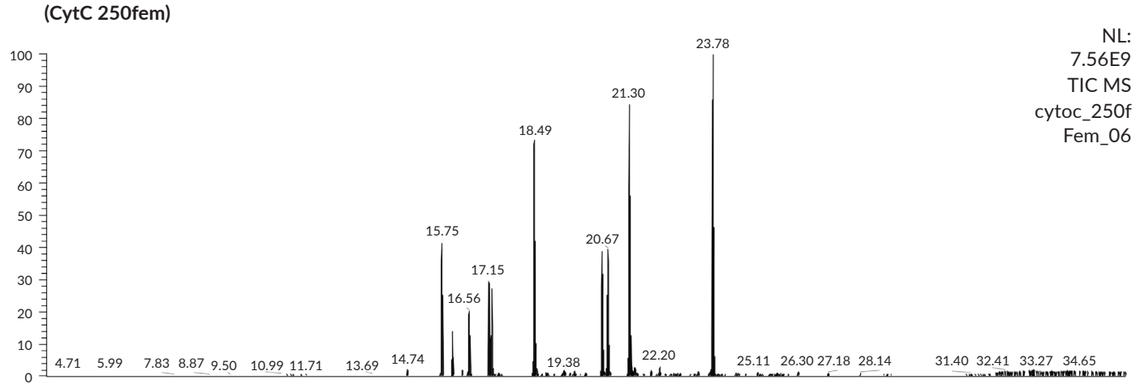


Figure 8: MS DATA: ReproSil-Pur C18-AQ, 1.9 µm (Cytochrom C Digest 250 fem (femtomole)).

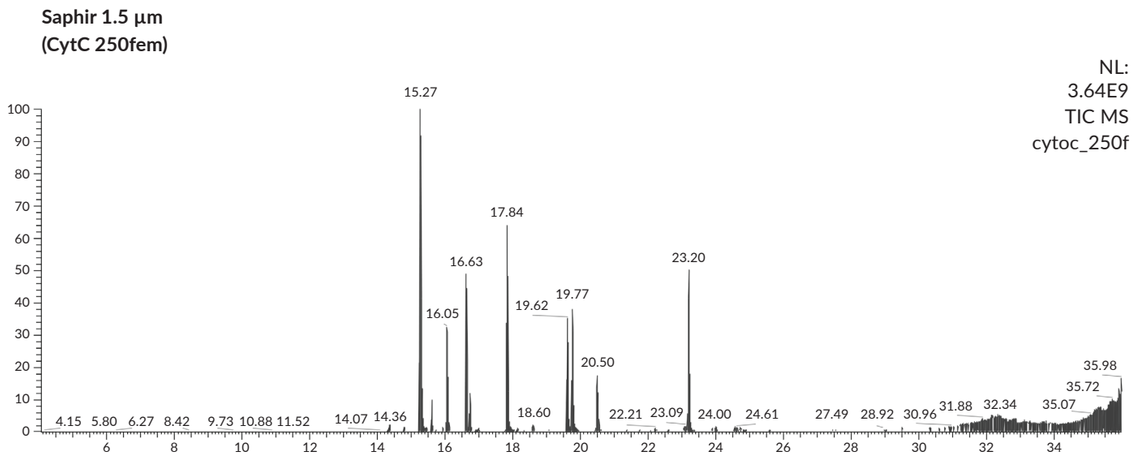


Figure 9: MS DATA: ReproSil Saphir 100 C18, 1.5 µm (Cytochrom C Digest 250 fem (femtomole)).

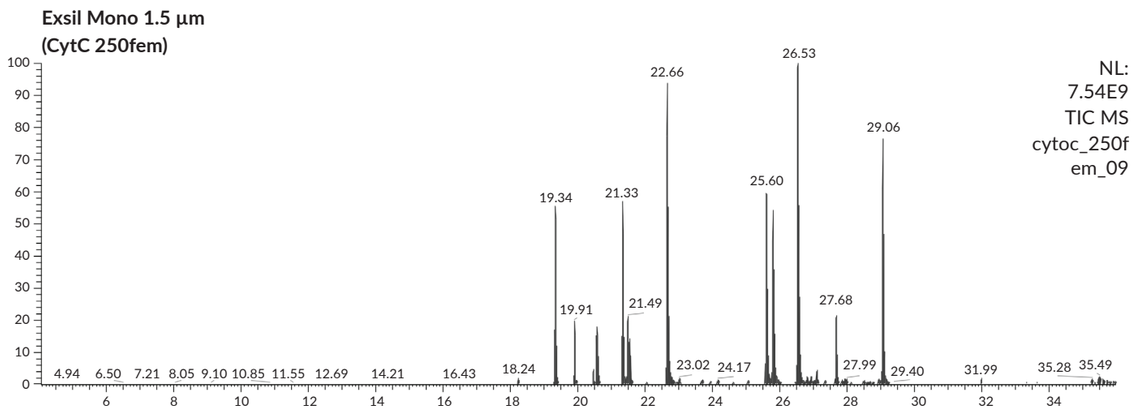


Figure 10: MS DATA: Exsil Mono 100 C18, 1.5 µm (Cytochrom C Digest 250 fem (femtomole)).

BULK MEDIA
TECHNICAL DATA

These media are available in the following particle sizes:

Table 3: Available Particle Sizes of ReproSil-Pur C18-AQ, ReproSil Saphir 100 C18 and Exsil Mono 100 C18.

Increasing Efficiency and Backpressure

	Particle Size and Part Number (PN)					
Media	1.5 µm	1.7 µm	1.8 µm	1.9 µm	3 µm	5 µm
ReproSil-Pur 120 C18-AQ	N/A	N/A	N/A	r119.aq	r13.aq	r15.aq
ReproSil Saphir 100 C18	ra115.9e	N/A	ra118.9e	N/A	ra13.93	ra15.9e
Exsil Mono 100 C18	5136782	6136847	N/A	N/A	5136783	5136784

Features

ReproSil-Pur 120 C18-AQ, 1.9 µm

- ReproSil-Pur 120 C18-AQ, 1.9 µm is considered as the gold standard in many proteomics labs, commonly packed in capillary columns, and served as the benchmark for comparison with ReproSil Saphir 100 C18, 1.5 µm and Exsil Mono 100 C18, 1.35 µm, 1.5 µm and 1.7 µm.
- The moderate surface area and carbon load contributed to outstanding peak shapes, ease of packability, and exceptional reproducibility.

ReproSil Saphir 100 C18, 1.5 µm

- The smaller particle size leads to an increased number of identified peptides.
- Its distinct selectivity compared to ReproSil-Pur 120 C18-AQ, 1.9 µm makes it an appealing alternative.

Exsil Mono 100 C18, 1.35 µm, 1.5 µm and 1.7 µm

- The smaller particle size, coupled with a narrower particle size distribution, results in the highest number of identified peptides.
- It exhibits the highest hydrophobicity among the three media.

Ordering Information

Table 4: Available Media.

	Part Number (PN)	
Media	0.1 g	1 g
ReproSil-Pur 120 C18-AQ, 1.9 µm	r119.aq	r119.aq.0001
ReproSil Saphir 100 C18, 1.5 µm	ra115.9e	ra115.9e.0001
Exsil Mono 100 C18, 1.35 µm	6136973	N/A
Exsil Mono 100 C18, 1.5 µm	5136782	5136782.0001
Exsil Mono 100 C18, 1.7 µm	6136847	6136847.0001

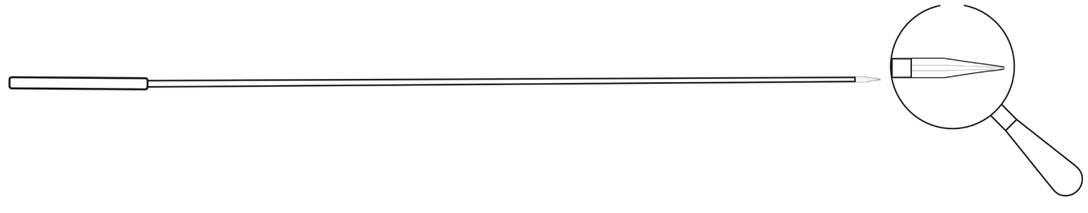


Figure 11: Scheme of an Empty Integrated Emitter Capillary.

Features

The performance of a Packed Integrated Emitter Capillary is highly dependent on the quality of the glass capillary used for packing the media.

Dr. Maisch conducted extensive testing on various:

- Fused silica tubing and polyimide coatings.
- Integrated emitter designs (including shape, orifice, size, and length).
- Polishing techniques.

Through this research, Dr. Maisch identified the optimal hardware for self-packing nano-LC columns with integrated emitters.

Dr. Maisch offers Empty Integrated Emitter Capillaries which combine:

- Top-performing sub-2 µm Dr. Maisch C18 silica.
- A revolutionary new packing process.
- A uniquely designed and packed emitter.

Ordering Information

Table 5: Ordering Information for Empty Integrated Emitter Capillaries.

Inner Diameter (ID) [µm]			Media	Fritted	Inlet	Outlet	Quantity	Part Number (PN)
75	100	150	Empty	No	Naked	Tip	2	ptmm.µm.02
75	100	150	Empty	No	Naked	Tip	10	ptmm.µm.10
75	100	150	Empty	No	Naked	Tip	20	ptmm.µm.20

Table 6: Ordering Information for Empty Integrated Emitter Capillaries.

Part Number (PN)	Description	Length [mm]	ID [µm]	Quantity
pt100.075.02	Empty Capillary, 100 mm x 75 µm	100	75	2
pt200.075.02	Empty Capillary, 200 mm x 75 µm	200	75	2
pt300.075.02	Empty Capillary, 300 mm x 75 µm	300	75	2
pt400.075.02	Empty Capillary, 400 mm x 75 µm	400	75	2
pt500.075.02	Empty Capillary, 500 mm x 75 µm	500	75	2

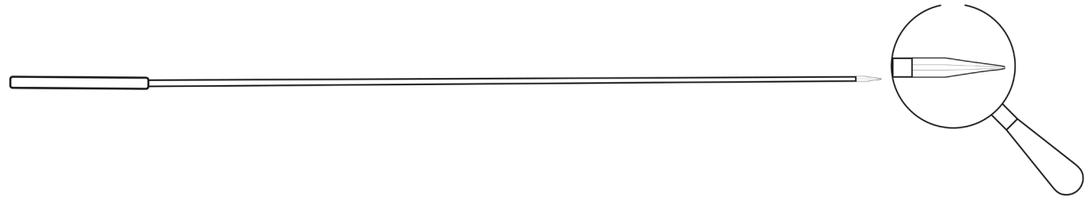


Figure 12: Scheme of a Packed Integrated Emitter Capillary.

Why Use NanoFusion (Packed Integrated Emitter Capillaries by Dr. Maisch) Instead of Packing Your Own?

- The best combination of performance, sensitivity, and reproducibility achieved through packed, pulled emitters.
- Packing pressures of up to 1200 bar minimize re-packing of capillaries, allowing for faster use of installed capillary columns and faster sample analysis.
- A commercial product with full QC documentation, traceability of QC data, and professional packaging and labeling.
- A significantly better cost-to-performance ratio.

At first glance, packing capillary columns yourself might seem like the most cost-effective option. The cost of silica and fused silica is relatively low. However, there are several hidden costs that are often overlooked:

- **Labor:** Time spent on pulling, packing, and quality testing.
- **Defective Goods:** Losses incurred during production.
- **Initial Investment:** Equipment such as a Sutter instrument and capillary column packer.

When considering all these factors, a commercially available, high-performance capillary column from **Dr. Maisch** offers significantly greater value. We would be delighted to demonstrate this to you.

Table 7: Ordering Information for NanoFusion Capillary Columns.

Inner Diameter (ID) [µm]			Media	Inlet	Outlet	Quantity	Part Number (PN)
75	100	150	Packed	Naked	Tip	2	media code.ptmm.µm.02
75	100	150	Packed	Naked	Tip	4	media code.ptmm.µm.04
75	100	150	Packed	Naked	Tip	10	media code.ptmm.µm.10

Table 8: Ordering Information for NanoFusion Capillary Collumns packed with Exsil Mono 100 C18, 1.35 µm.

Part Number (PN)	Description	Length [mm]	ID [µm]	Quantity
6136973.pt050.075.01	NanoFusion, Exsil Mono 100 C18, 1.35 µm, 50 mm x 75 µm	50	75	1
6136973.pt100.075.01	NanoFusion, Exsil Mono 100 C18, 1.35 µm, 100 mm x 75 µm	100	75	1
6136973.pt150.075.01	NanoFusion, Exsil Mono 100 C18, 1.35 µm, 150 mm x 75 µm	150	75	1

Table 9: Ordering Information for NanoFusion Capillary Collumns packed with Exsil Mono 100 C18, 1.5 µm.

Part Number (PN)	Description	Length [mm]	ID [µm]	Quantity
5136782.pt100.075.01	NanoFusion, Exsil Mono 100 C18, 1.5 µm, 100 mm x 75 µm	100	75	1
5136782.pt150.075.01	NanoFusion, Exsil Mono 100 C18, 1.5 µm, 150 mm x 75 µm	150	75	1
5136782.pt200.075.01	NanoFusion, Exsil Mono 100 C18, 1.5 µm, 200 mm x 75 µm	200	75	1
5136782.pt250.075.01	NanoFusion, Exsil Mono 100 C18, 1.5 µm, 250 mm x 75 µm	250	75	1
5136782.pt300.075.01	NanoFusion, Exsil Mono 100 C18, 1.5 µm, 300 mm x 75 µm	300	75	1
5136782.pt400.075.01	NanoFusion, Exsil Mono 100 C18, 1.5 µm, 400 mm x 75 µm	400	75	1

Table 10: Ordering Information for NanoFusion Capillary Columns packed with Exsil Mono 100 C18, 1.7 µm.

Part Number (PN)	Description	Length [mm]	ID [µm]	Quantity
6136847.pt100.075.01	NanoFusion, Exsil Mono 100 C18, 1.7 µm, 100 mm x 75 µm	100	75	1
6136847.pt150.075.01	NanoFusion, Exsil Mono 100 C18, 1.7 µm, 150 mm x 75 µm	150	75	1
6136847.pt200.075.01	NanoFusion, Exsil Mono 100 C18, 1.7 µm, 200 mm x 75 µm	200	75	1
6136847.pt250.075.01	NanoFusion, Exsil Mono 100 C18, 1.7 µm, 250 mm x 75 µm	250	75	1
6136847.pt300.075.01	NanoFusion, Exsil Mono 100 C18, 1.7 µm, 300 mm x 75 µm	300	75	1
6136847.pt400.075.01	NanoFusion, Exsil Mono 100 C18, 1.7 µm, 400 mm x 75 µm	400	75	1
6136847.pt500.075.01	NanoFusion, Exsil Mono 100 C18, 1.7 µm, 500 mm x 75 µm	500	75	1

NANOFUSION
ORDERING INFORMATION

Table 11: Ordering Information for NanoFusion Capillary Columns packed with ReproSil Saphir 100 C18, 1.5 µm.

Part Number (PN)	Description	Length [mm]	ID [µm]	Quantity
ra115.9e.pt100.075.01	NanoFusion, ReproSil Saphir 100 C18, 1.5 µm, 100 mm x 75 µm	100	75	1
ra115.9e.pt150.075.01	NanoFusion, ReproSil Saphir 100 C18, 1.5 µm, 150 mm x 75 µm	150	75	1
ra115.9e.pt200.075.01	NanoFusion, ReproSil Saphir 100 C18, 1.5 µm, 200 mm x 75 µm	200	75	1
ra115.9e.pt250.075.01	NanoFusion, ReproSil Saphir 100 C18, 1.5 µm, 250 mm x 75 µm	250	75	1
ra115.9e.pt300.075.01	NanoFusion, ReproSil Saphir 100 C18, 1.5 µm, 300 mm x 75 µm	300	75	1
ra115.9e.pt400.075.01	NanoFusion, ReproSil Saphir 100 C18, 1.5 µm, 400 mm x 75 µm	400	75	1
ra115.9e.pt500.075.01	NanoFusion, ReproSil Saphir 100 C18, 1.5 µm, 500 mm x 75 µm	500	75	1

Table 12: Ordering Information for NanoFusion Capillary Columns packed with ReproSil-Pur 120 C18-AQ, 1.9 µm.

Part Number (PN)	Description	Length [mm]	ID [µm]	Quantity
r119.aq.pt100.075.01	NanoFusion, ReproSil-Pur 120 C18- AQ, 1.9 µm, 100 mm x 75 µm	100	75	1
r119.aq.pt150.075.01	NanoFusion, ReproSil-Pur 120 C18- AQ, 1.9 µm, 150 mm x 75 µm	150	75	1
r119.aq.pt200.075.01	NanoFusion, ReproSil-Pur 120 C18- AQ, 1.9 µm, 200 mm x 75 µm	200	75	1
r119.aq.pt250.075.01	NanoFusion, ReproSil-Pur 120 C18- AQ, 1.9 µm, 250 mm x 75 µm	250	75	1
r119.aq.pt300.075.01	NanoFusion, ReproSil-Pur 120 C18- AQ, 1.9 µm, 300 mm x 75 µm	300	75	1
r119.aq.pt400.075.01	NanoFusion, ReproSil-Pur 120 C18- AQ, 1.9 µm, 400 mm x 75 µm	400	75	1
r119.aq.pt500.075.01	NanoFusion, ReproSil-Pur 120 C18- AQ, 1.9 µm, 500 mm x 75 µm	500	75	1

Other dimensions available on request.

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Customer Results 1 - Superior Performance of ReproSil Saphir 100 C18, 1.5 µm

A comparison was performed between commercially available Integrated Emitter Capillaries, which are packed by Dr. Maisch, and self-pulled, self-packed Integrated Emitter Capillaries by a customer.

An initial positive observation was the significantly lower backpressure of the Dr. Maisch Integrated Emitter Capillaries (length: 30 cm) with less than 300 bar at 50 °C.

Materials and Methods

LC-MS System:
Thermo Scientific™ Vanquish™ Neo UHPLC system.
Combined with the Thermo Scientific Orbitrap Astral mass spectrometer.

Analytes:
HeLa cell lysate with different loading amounts: 0.25 ng, 0.5 ng, and 5 ng.

Different amounts are based on differences in pickup volumes. Warning 0.25 ng is realized with 0.2 µl pickup at the Vanquish™ Neo UHPLC system. Therefore, 250 pg loadings are not expected to be as precise as higher loading amounts.

Elution Type: Gradient (for 20 cm and 30 cm column length)
A: ACN/H_2O 2:98 + 0.1% Formic Acid
B: ACN/H_2O 90:10 + 0.1% Formic Acid

Table 13: Gradient.

Time [min]	Flow Rate [µl/min]	%B
0	0.35	2
1	0.25	7
11	0.25	20
18.5	0.25	30
20.5	0.25	60
21.5	0.35	90
26.5	0.35	90

Temperature: 50 °C

CUSTOMER RESULTS

Integrated Emitter Capillaries:

- ReproSil Saphir 100 C18, 1.5 µm (30 cm x 75 µm)
  Part Number (PN): r119.aq.pt300.075.0001
  Commercial Product from Dr. Maisch HPLC GmbH
- ReproSil-Pur 120 C18-AQ, 1.9 µm (30 cm x 75 µm)
  Part Number (PN): ra115.9e.pt300.075.0001
  Commercial Product from Dr. Maisch HPLC GmbH
- ReproSil-Pur 120 C18-AQ, 1.9 µm (20 cm x 75 µm)
  Self-pulled and self-packed Integrated Emitter Capillaries from a customer

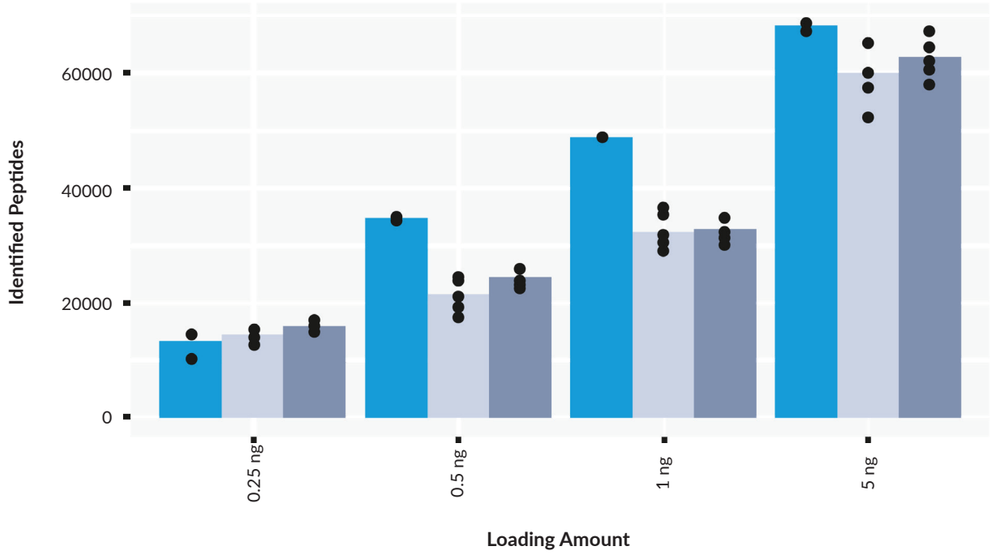

Figure 13: Number of Identified Peptides at different Loading Amounts on the 3 different Integrated Emitter Capillaries. Used Analysis Software: DIANN 1.9.1 Lib Free.

Conclusion:

Very similar number of Identified Peptides on self-packed and Dr. Maisch's Integrated Emitter Capillaries. Significantly lower backpressure on Dr. Maisch's Integrated Emitter Capillaries.
Significantly higher number of Identified Peptides on Integrated Emitter Capillaries using ReproSil Saphir 100 C18, 1.5 µm (Loading Amounts: 0.5 ng, 1 ng and 5 ng).

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CUSTOMER RESULTS

Customer Results 2 – Outstanding Performance of Exsil Mono 100 C18, 1.35 µm

In this independent study conducted by the Proteomics and Mass Spectrometry Core Facility (PMS CF) at the University of Bern, several commercially available Integrated Emitter Capillaries, packed with C18-RP-phases, from Dr. Maisch HPLC GmbH, Germany were evaluated against a home-made self-packed capillary column C20 from PMS CF to identify the sub-2 µm Bulk Media with the highest separation efficiency for peptide analysis.

The number of MS/MS identified Peptides and Proteins indicates the separation quality of the capillary columns.

To enhance method robustness, trapping cartridges were installed upstream of the analytical capillary columns.

Analytes: HEK cell lysate (Internal Standard)
Mix of 5 digest Proteins (Quality Control (QC))

Trapping Cartridges: ReproSil Saphir 100 C18, 3 µm
(PN: ra15.9e.t000.3)
ReproSil-Pur 120 C18-AQ, 3 µm
(PN: r13.aq.t000.3)
PepMap Neo Trap, 5 µm
(PN: 174500)

Cartridge Dimensions: 5 mm x 0.3 mm

Capillary Columns: (self-packed) Home-Made (C20) C18, 1.7 µm

Capillary Columns: (Dr. Maisch) ReproSil-Pur 120 C18-AQ, 1.9 µm
(PN: r119.aq.pt200.075.0001)
ReproSil Saphir 100 C18, 1.5 µm
(PN: ra115.9e.pt200.075.0001)
Exsil Mono 100 C18, 1.35 µm
(PN: 6136973.pt200.075.0001)

Column Dimensions: 200 mm x 75 µm

Elution Type: Gradient
A: ACN/H_2O 2:98 + 0.1% Formic Acid
B: ACN/H_2O 95:5 + 0.1% Formic Acid

Table 14: Gradient 1 (10 min).

Time [min]	Flow Rate [µl/min]	%B
0	0.200 - 0.400	0
3.5	0.200 - 0.400	0
4.5	0.200 - 0.400	5
10.5	0.200 - 0.400	25
13.5	0.200 - 0.400	40
15.5	0.200 - 0.400	60
16.5	0.200 - 0.400	80
23.5	0.200 - 0.400	80
25.5	0.200 - 0.400	0
37	0.200 - 0.400	0

Table 15: Gradient 2 (30 min).

Time [min]	Flow Rate [µl/min]	%B
0	0.200 - 0.400	0
3.5	0.200 - 0.400	0
4.5	0.200 - 0.400	5
20.5	0.200 - 0.400	25
25	0.200 - 0.400	32.5
33.5	0.200 - 0.400	40
35.5	0.200 - 0.400	60
36.5	0.200 - 0.400	80
43.5	0.200 - 0.400	80
45.5	0.200 - 0.400	0
57	0.200 - 0.400	0

Flow Rate: To achieve a fair chromatographic comparison the flow rate was adapted on each capillary column to have a pressure between 300-400 bar.

Temperature: 50 °C

Chromatographic, Mass Spectrometric Settings and Analytes

Analytes:
HEK cell lysate standard sample was injected in triplicates with different loading amounts (1 ng, 10 ng and 200 ng).

The LC-MS Settings:

HPLC-System: Thermo Scientific UltiMate 3000
Mass Spectrometer: Bruker timsTOF HT
Source: Captive Spray

Data Processing:

FragPipe search engine was used (ver.: 22.0). Basic settings:

- Minimum of 2 Peptides per Proteins.
- 1 % FDR threshold (PS Ms, Peptides and Proteins).
- Variable modifications: Oxidation (M), acetyl Protein N term.
- Fixed modifications: Carbamidomethylation (C).
- Quantification: Performed without MBR (match between runs).
- Validation: MS Booster rescoring model with Prosit 2023 Intensity tims TOF.
- Database: SwissProt Horne Sapiens proteins sequences (with isoforms), version 2025_01 with common contaminants (Contains 85,156 entries).

CUSTOMER RESULTS

Results:
Quality Control (QC): Mix of 5 digest Proteins - Identification Results

Table 16: Identification Results.

Row Labels	Data Points per Peak (MS1)	Data Points per Peak (MS2)	Average of PeakWidth	Average of Median FWHM [min]	Sum of PG.Quantity	Peptide Counts
C20_SaphirTrap						
20250226_C20_SaphirTRAP_QC_10min_DIA_i01_RA2_1_126	4	4	0.055147648	0.032257967	11036639.94	7061
20250226_C20_SaphirTRAP_QC_10min_DIA_i02_RA2_1_127	4	4	0.05377388	0.032148264	10707478.13	6708
20250226_C20_SaphirTRAP_QC_10min_DIA_i03_RA2_1_128	4	4	0.055512428	0.032147694	10736761.84	6546
Exsil Mono_SaphirTrap						
20250228_MonoExsil_SaphirTRAP_QC_10min_DIA_i01_RA2_1_151	3	3	0.045816422	0.02515705	13574435.07	12042
20250228_MonoExsil_SaphirTRAP_QC_10min_DIA_i02_RA2_1_152	3	3	0.045948029	0.025331877	13142863.92	12390
20250228_MonoExsil_SaphirTRAP_QC_10min_DIA_i03_RA2_1_153	3	3	0.044762611	0.024653507	12342372.59	11605
Pur_pulledTIP						
20250224_Repro_Pur_pulledTip_QC_10min_DIA_i01_RA2_1_69	4	4	0.068077087	0.039580517	1828050.608	1186
20250224_Repro_Pur_pulledTip_QC_10min_DIA_i02_RA2_1_70	4	4	0.066978931	0.04003205	3133660.407	2481
20250224_Repro_Pur_pulledTip_QC_10min_DIA_i03_RA2_1_71	4	4	0.06558609	0.039711505	2354926.014	1353
Saphir_pulledTIP						
20250220_Repro_Saphir_pulledTip_QC_10min_DIA_i01_RA2_1_19	3	3	0.044311523	0.02535391	9519295.898	5463
20250220_Repro_Saphir_pulledTip_QC_10min_DIA_i02_RA2_1_20	3	3	0.044538498	0.025769863	9005777.974	5003
20250220_Repro_Saphir_pulledTip_QC_10min_DIA_i03_RA2_1_21	3	3	0.044728756	0.025742773	8936329.193	5140

Conclusion:

The capillary column packed with Exsil Mono 100 C18, 1.35 µm consistently outperformed all other columns, regardless of the injected sample amount or gradient length.

Data courtesy of Prof. Dr. Manfred Heller, Sophie Braga Lagache Proteomics and Mass Spectrometry Core Facility (PMS CF) University of Bern, Murtenstrasse 28, 3008 Bern, Switzerland.

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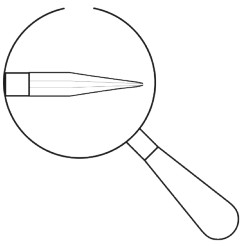

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