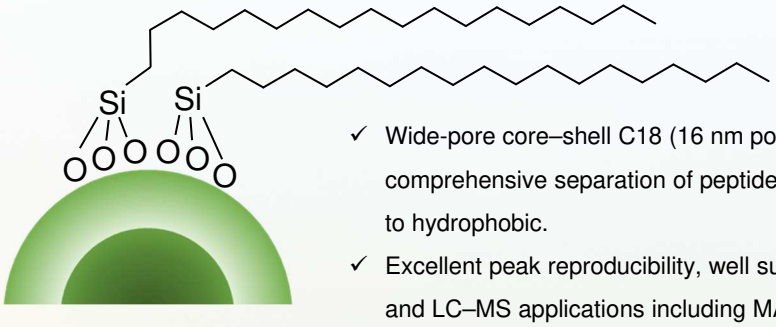
SunShell Peptide

For LC-MS Analysis

ChromaNik Technologies Inc.

Reversed-phase column optimized for peptide LC–MS analysis

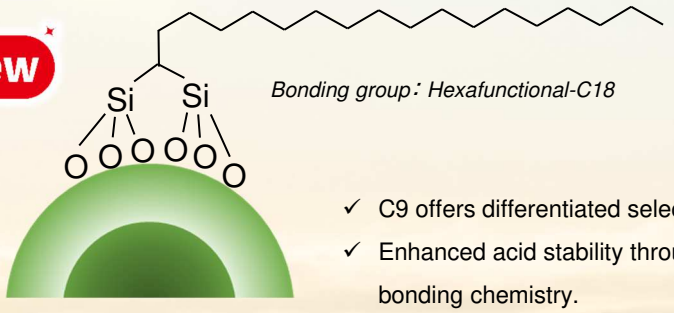
C18



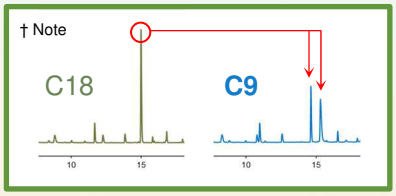
- ✓ Wide-pore core–shell C18 (16 nm pore size) designed for comprehensive separation of peptides ranging from highly polar to hydrophobic.
- ✓ Excellent peak reproducibility, well suited for peptide mapping and LC–MS applications including MAM (Multi-Attribute Method).

C9

New

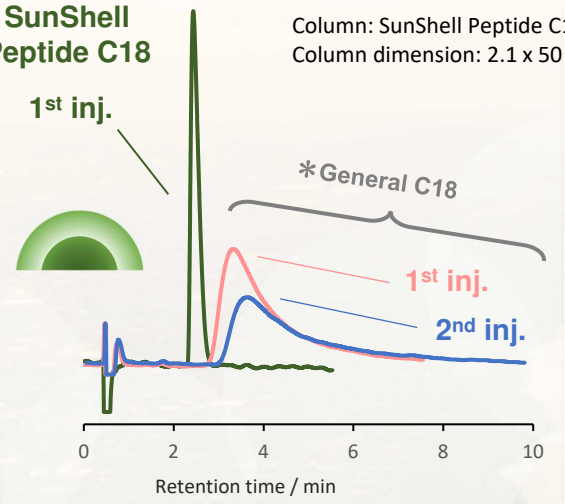


Bonding group: Hexafunctional-C18



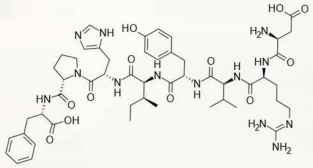
- ✓ C9 offers differentiated selectivity with reduced carbon load.†
- ✓ Enhanced acid stability through the introduction of multifunctional bonding chemistry.

SunShell Peptide C18



Column: SunShell Peptide C18 , general C18*
Column dimension: 2.1 x 50 mm, 2.6 µm

Mobile phase:
Acetonitrile/**0.1% Formic acid in water**
= 15 / 85, Flow rate: 0.3 mL/min
Temperature: 40 ℃
Detection: UV@210 nm
Sample: Angiotensin II



Note: Conventional reversed-phase columns show poor peptide and protein peak shapes under **formic-acid** conditions.
TFA improves peak shape but causes **ion suppression** in LC–MS.

SunShell Peptide, **SunShell Protein** are low-adsorption columns optimized for strong, reproducible peaks under formic-acid LC–MS conditions.

ChromaNik Technologies Inc.

SunShell Protein

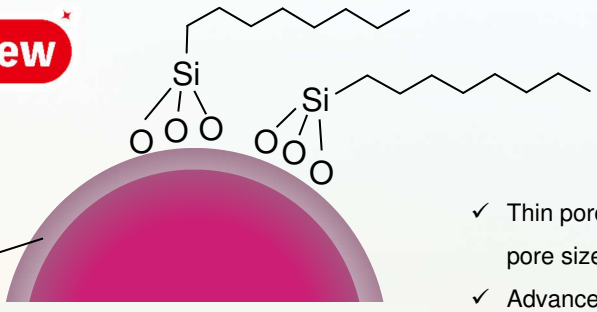
For LC-MS Analysis

ChromaNik Technologies Inc.

Reversed-phase column optimized for protein LC–MS analysis

C8

New



Thin porous-shell (0.2 µm)

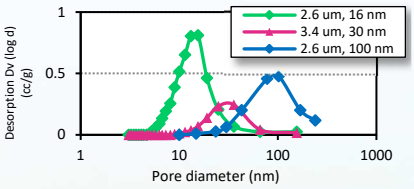
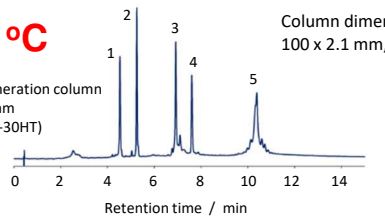


Fig. Pore size distribution of core–shell particles for biomolecules

- ✓ Thin porous-shell core–shell particles with a 30 nm pore size balance protein separation and elution.
- ✓ Advanced end-capping for high-temperature operation.

80 °C



Previous-generation column chromatogram (SunShell C8-30HT)

Column dimension: 100 x 2.1 mm, 3.4 µm

Sample:
1 = Cytochrome C
2 = Lysozyme
3 = BSA
4 = Myoglobin
5 = Ovalbumin

See Application Data No. 1060 for details.

For reference:

SunShell Bio C4 is also effective for very large biomolecules such as monoclonal antibodies.

Column name	Core-shell silica				Bonding phase					
	Particle size(µm)	Core diameter (µm)	Pore diameter (nm)	Surface area(m^2/g)	Bonded phase	Carbon load (%)	Bonding density(µmol/m^2)	End-capping	Maximum operating pressure	Operating pH range
SunShell Peptide C18	2.6	1.6	16	90	C18	5	2.5	Sunniest end-capping	60 MPa	1.5 - 10
New SunShell Peptide C9	2.6	1.6	16	90	C18	2.5	1.2	Sunniest end-capping	60 MPa	1.5 – 9
New SunShell Protein C8	3.4	3.0	30	15	C8	0.5	2.5	Sunniest end-capping	60 MPa	1.5 – 9

LC–MS dedicated columns	I.D. (mm)	2.1
For peptides	Length (mm)	Part No.
SunShell Peptide C18, 2.6 µm	50	TB6942
	100	TB6962
	150	TB6972
SunShell Peptide C9, 2.6 µm	50	TG6942
	100	TG6962
	150	TG6972

LC–MS dedicated columns	I.D. (mm)	2.1
For proteins	Length (mm)	Part No.
SunShell Protein C8, 3.4 µm	50	T55942
	100	T55962
	150	T55972

Note: SunShell Peptide C18, C9, and Protein C8 correspond to SunShell C18-WP, HFC18-16, and C8-30-HT packing materials, respectively.

SunShell Peptide and SunShell Protein are specially inertized columns designed to provide high reproducibility for peptide and protein analysis under LC–MS mobile-phase conditions such as 0.1% formic acid.

Specifications are subject to change without notice.

Manufacturer & Supplier
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