

塩基性ポリペプチドの分離

Basic polypeptides

SunShell C18 2.6 μm, 150 x 2.1 mm i.d.

SunShell Bio C4 2.6 μm, 150 x 2.1 mm i.d.

SunShell C18

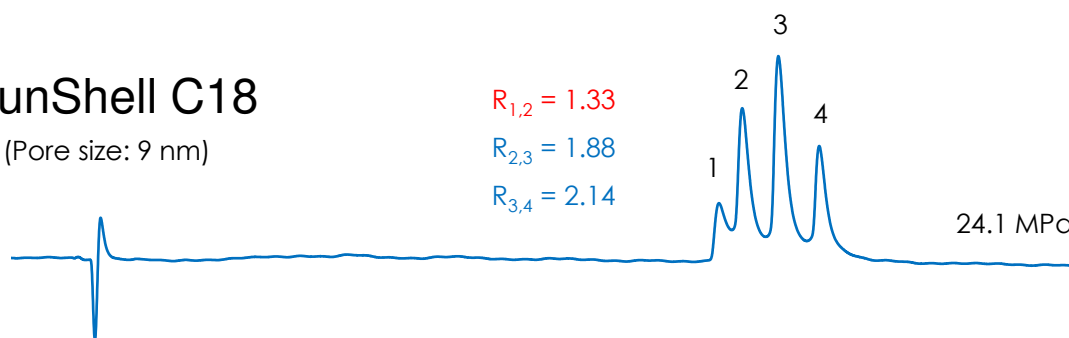
(Pore size: 9 nm)

$R_{1,2} = 1.33$

$R_{2,3} = 1.88$

$R_{3,4} = 2.14$

R: 分離度



SunShell Bio C4

(Pore size: 100 nm)

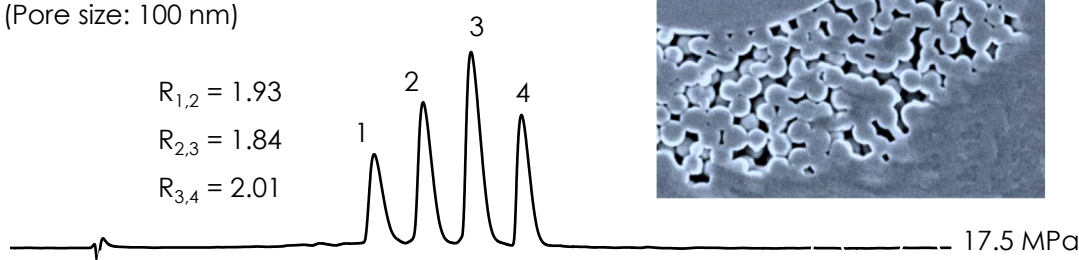
$R_{1,2} = 1.93$

$R_{2,3} = 1.84$

$R_{3,4} = 2.01$

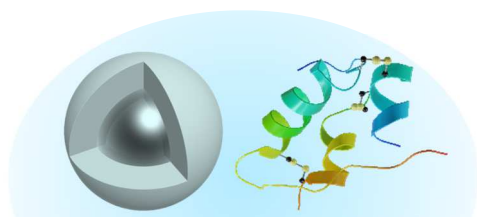
Pore size

100 nm (1000Å)



0 5 10 15

Retention time / min



SunShell Bio series is a peptide- and protein-dedicated column that uses superficially porous particles (SPPs) with ultra-wide pores.

Amino Acid Sequence (Protamine)

I : H-**PPRRR**SSSRPI**RRRRP**RRAS**RRRRRR**GG**RRRR**-OH

II : H-**PPRRR**SSSRPV**RRRRP**RRV**RRRRRR**GG**RRRR**-OH

III : H-**PPRRR**SSRRPV**RRRRP**RRV**RRRRRR**GG**RRRR**-OH

IV : H-**PPRRR**ASRR**IRRRRR**PRV**RRRRR**GG**RRRR**-OH

Column: SunShell C18, SunShell Bio C4
 Column dimension: 2.6 μm 150 x 2.1 mm
 Mobile phase: A)0.1% TFA in Water B)Acetonitrile
 Gradient program: B.Conc 10%(0 min) to 20%(20 min)

Flow rate: 0.3 ml/min
 Temperature: 40 °C
 Detection: UV@220 nm
 Sample: Protamine sulfate, from Salmon*

*Salmon-derived protamine is a mixture of peptides (I-IV), each consisting of 30 to 32 amino acid residues, primarily composed of Arginine [R].

塩基性ポリペプチドの分離

Basic polypeptides

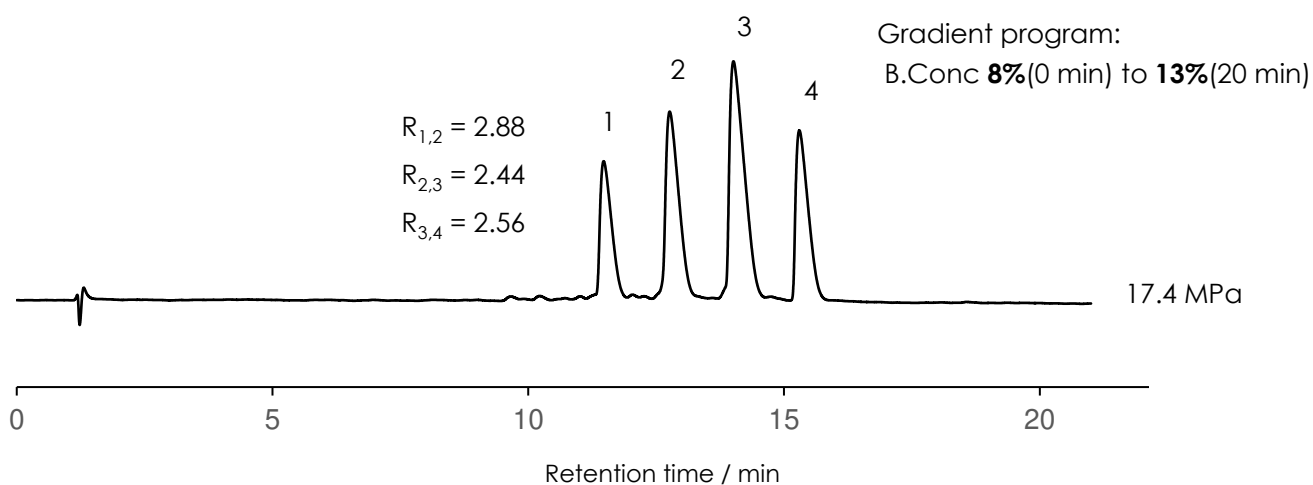
SunShell Bio C4 2.6 μ m, 150 x 2.1 mm i.d.

SunShell Bio C18 2.6 μ m, 100 x 2.1 mm i.d.

SunShell Bio C4

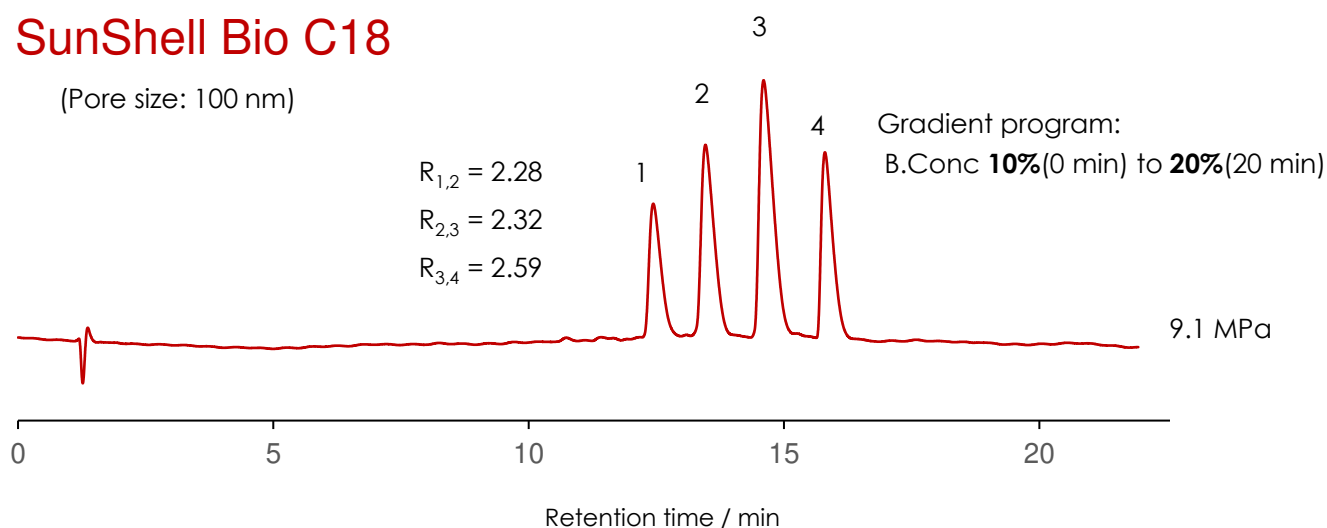
(Pore size: 100 nm)

R:分離度



SunShell Bio C18

(Pore size: 100 nm)



Column: SunShell Bio C4, 2.6 μ m 150 x 2.1 mm
SunShell Bio C18, 2.6 μ m 100 x 2.1 mm
Mobile phase: A)0.1% TFA in Water B)Acetonitrile
Gradient program: shown above

Flow rate: 0.3 ml/min(C4), 0.2 ml/min(C18)
Temperature: 40 °C
Detection: UV@220 nm
Sample: Protamine sulfate, from Salmon*