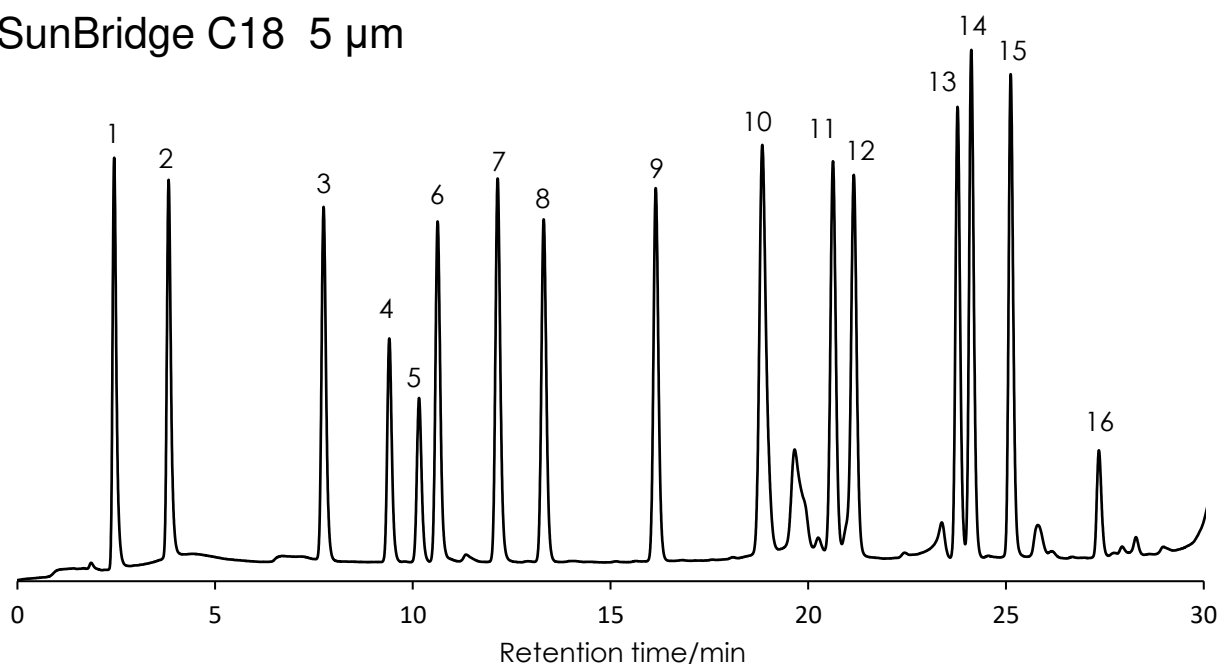


OPA誘導体化アミノ酸の分離 (3)

SunBridge C18 5 μm ,
150 x 3.0 mm i.d.

Amino Acids derivatized with OPA (3)

SunBridge C18 5 μm



Column: SunBridge (Ultra hybrid silica) C18 5 μm , Company B (Partially hybrid silica) C18 3 μm

Column dimension: 150 x 3.0 mm

Mobile phase: A) 10 mM Na_2HPO_4 with 10 mM $\text{Na}_2\text{B}_4\text{O}_7$ pH 8.2

B) Acetonitrile / Methanol / Water = 45 / 45 / 10

Gradient program: shown right

Flow rate: 0.55 mL/min, Temperature: 40 $^\circ\text{C}$

Detection (Fluorescent): Ex. at 350 nm, Em. at 450 nm

Labeling method: In autosampler *

Instrument: Nexera LC-40 (Shimadzu)

Time (min)	A (%)	B (%)
0	98	2
20	70	30
28.5	45	55
29.5	0	100
38	0	100
39	98	2

Sample: 1 = Aspartate, 2 = Glutamate, 3 = Serine, 4 = Histidine, 5 = Glycine,
6 = Threonine, 7 = Arginine, 8 = Alanine, 9 = Tyrosine, 10 = Cystine,
11 = Valine, 12 = Methionine, 13 = Phenylalanine, 14 = Isoleucine, 15 = Leucine, 16 = Lysine
(Wako Amino Acids Mixture Standard Solution, Type H, 50 μM /sample)

* 0.1 M Boric acid buffer (pH 9.8) with 3-mercaptoethanol, aspiration/dispensing
0.1 M Boric acid buffer (pH 9.8) with o-phthalaldehyde, aspiration/dispensing/mixing
Measurement samples, aspiration/dispensing/mixing
Fmoc-HCl in acetonitrile, aspiration/dispensing/mixing
Diluent (0.5% phosphoric acid), aspiration/dispensing/mixing

提供: 地方独立行政法人大阪産業技術研究所 大橋先生

OPA誘導体化アミノ酸の分離 (3)

SunBridge C18 5 μ m,
150 x 3.0 mm i.d.

Amino Acids derivatized with OPA (3)

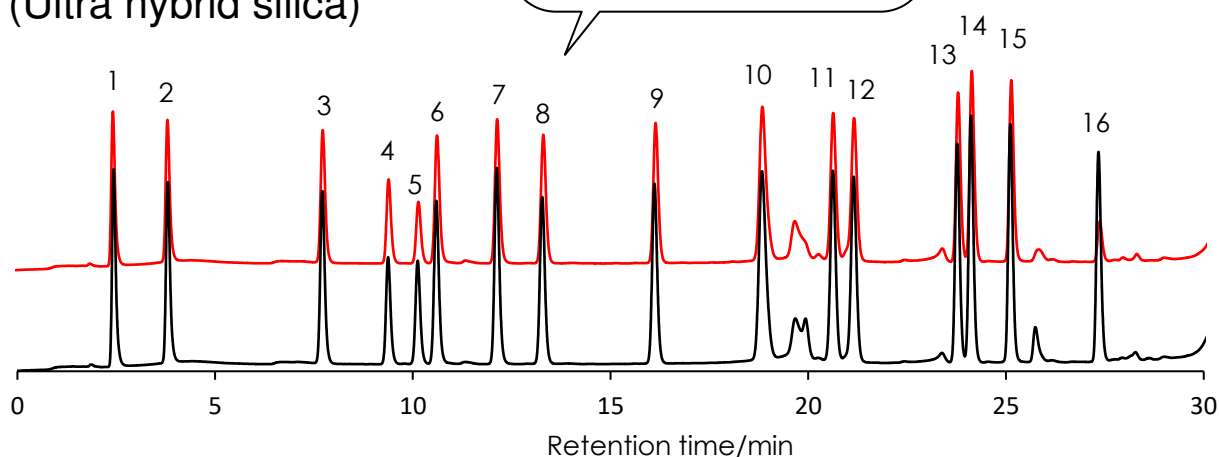
— Day1

Left under alkaline conditions (pH 8.2) for 3 days,
followed by washing with 100% B for about 10 min

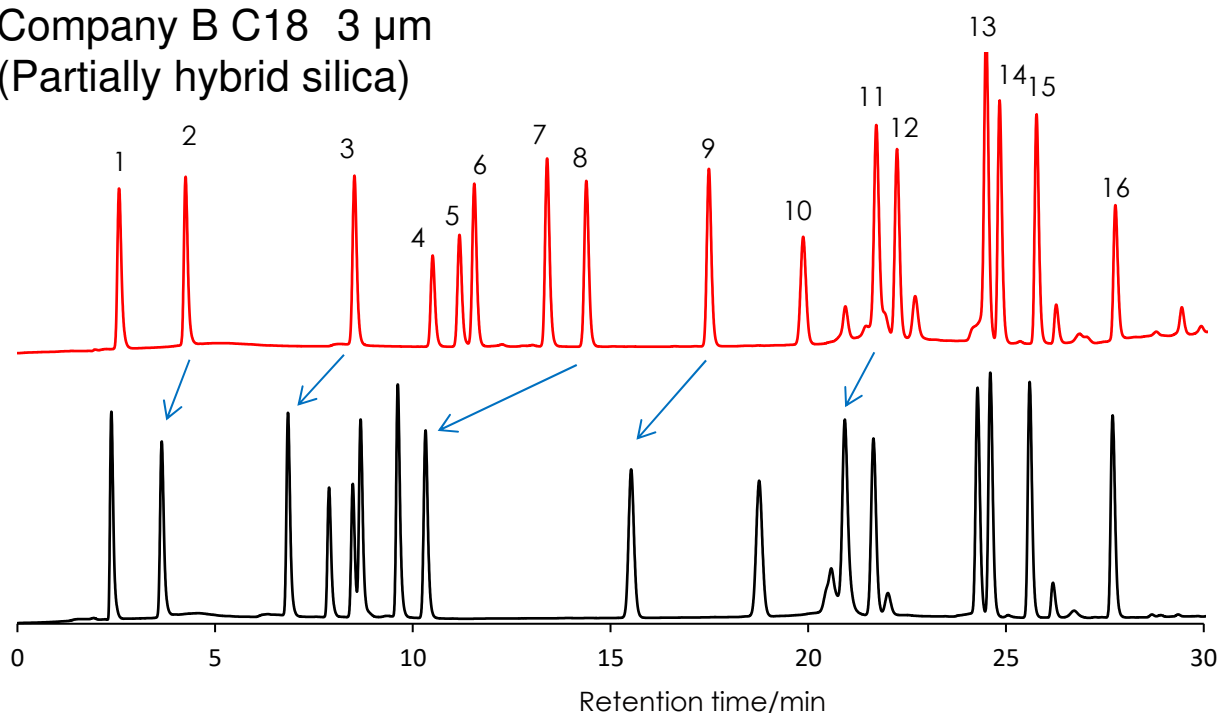
— Day4

SunBridge C18 5 μ m
(Ultra hybrid silica)

Good reproducibility



Company B C18 3 μ m
(Partially hybrid silica)



HPLC Condition: shown on the previous page

提供: 地方独立行政法人大阪産業技術研究所 大橋先生