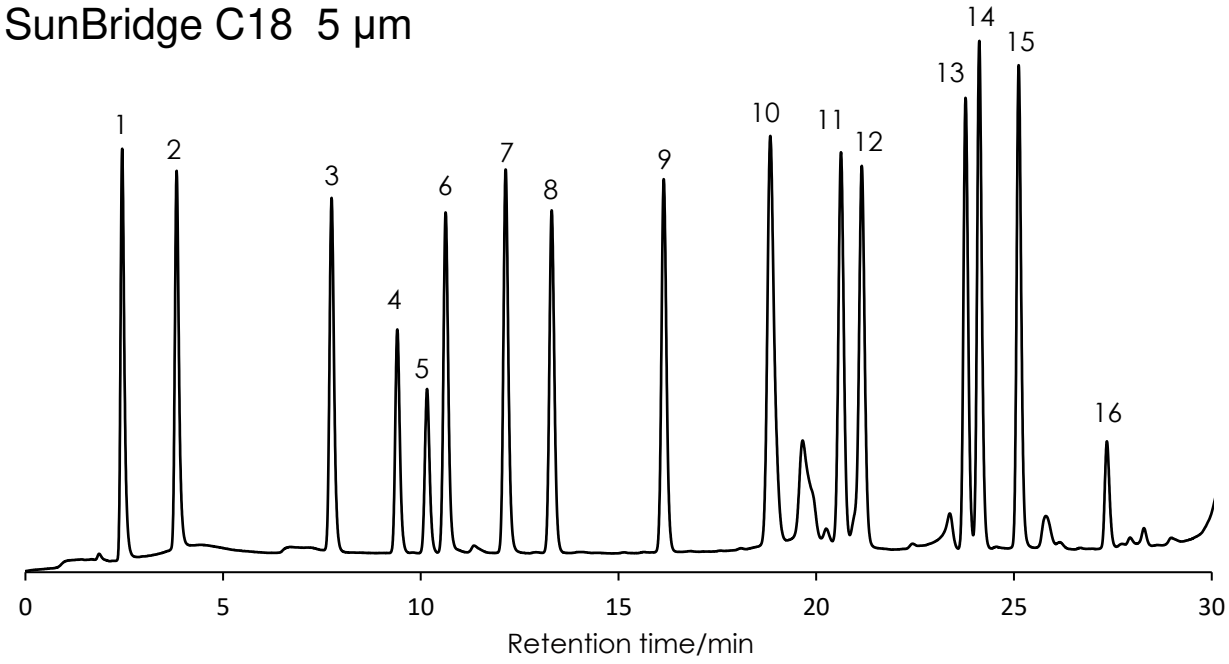
ChromaNik Technologies Inc.

OPA誘導体化アミノ酸の分離 (3)

SunBridge C18 5 µm, 150 x 4.6 mm i.d.

Amino Acids derivatized with OPA (3)

SunBridge C18 5 µm



Column: SunBridge (Ultra hybrid silica) C18 5 µm, Company A (Partial hybrid silica) C18 3 µm
Column dimension: 100 x 3.0 mm
Mobile phase: A) 10 mM Na_2HPO_4 with 10 mM $Na_2B_4O_7$ pH 8.2
B) Acetonitrile / Methanol / Water = 45 / 45 / 2
Gradient program: shown right
Flow rate: 0.55 mL/min, Temperature: 40 °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 = Thyrosine, 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

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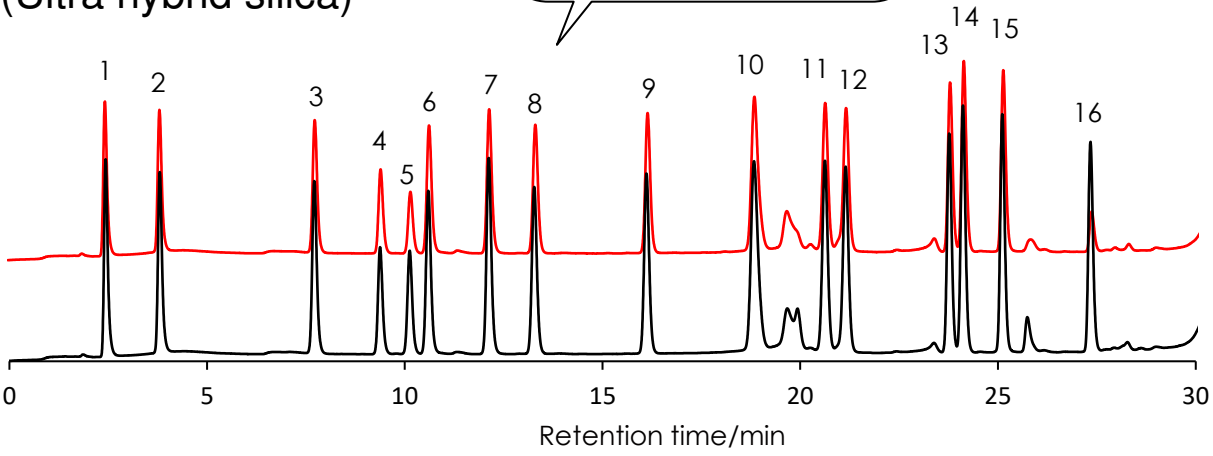
Amino Acids derivatized with OPA (3)

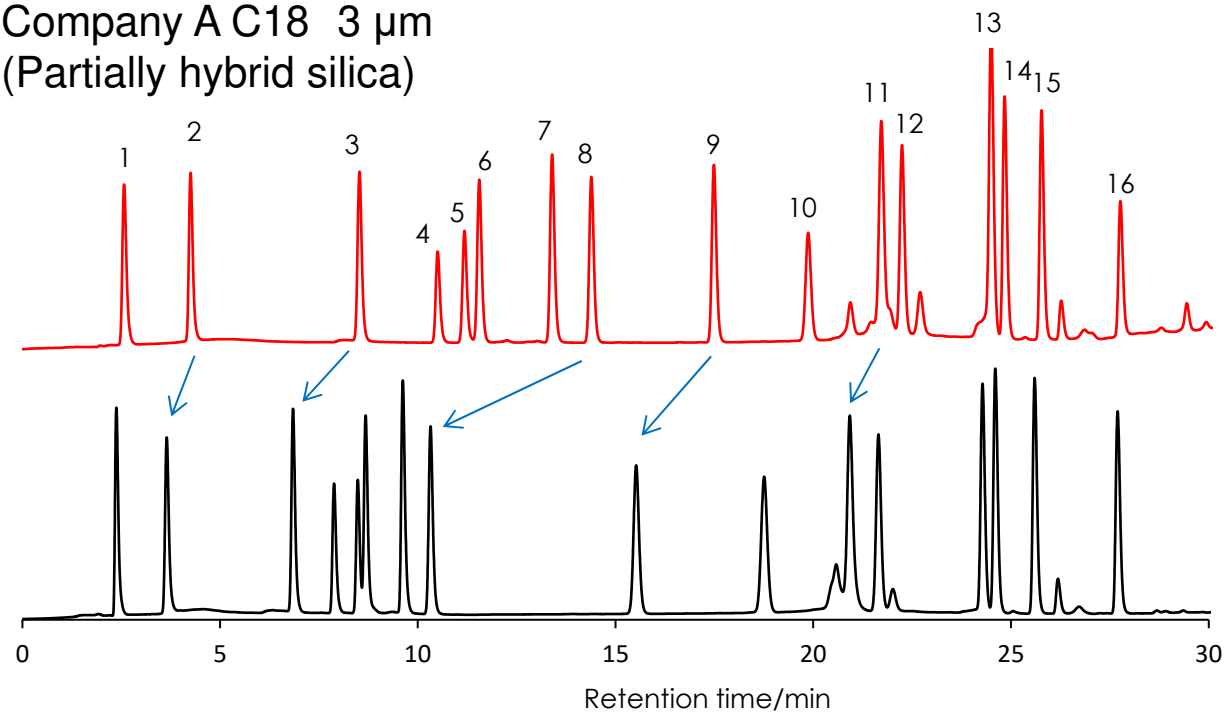
Day1 — Left under alkaline conditions (pH 8.2) for 3 days, followed by washing with 100% B for about 10 min — Day4

SunBridge C18 5 µm
(Ultra hybrid silica)

Good reproducibility



Company A C18 3 µm
(Partially hybrid silica)



HPLC Condition: shown on the previous page

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