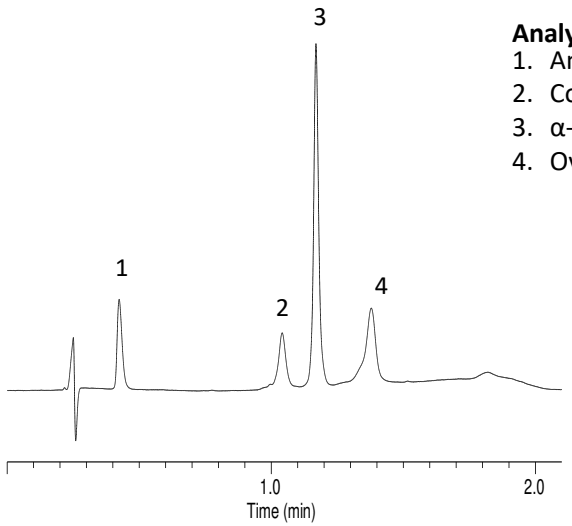
Applications

ProteoSil Application

Peptide and Protein



Analyte:

1.	Angiotensin II	100 mg/L
2.	Conalbumin	100 mg/L
3.	α-Chymotrypsinogen A	300 mg/L
4.	Ovalbumin	500 mg/L

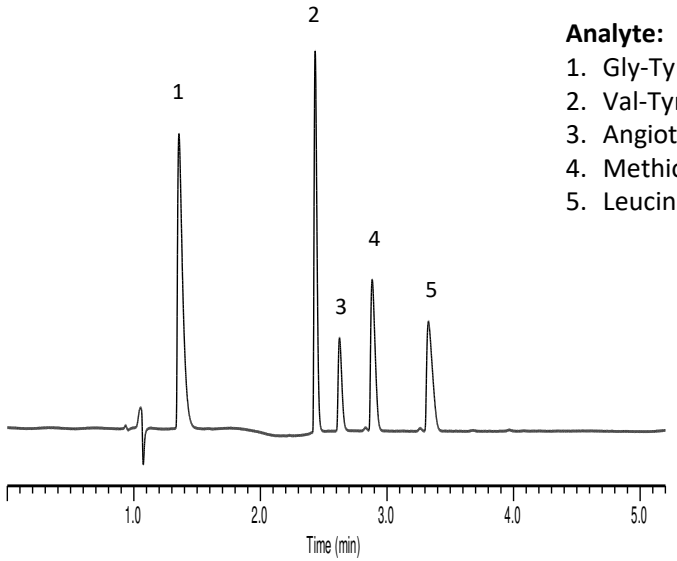
Conditions

System : HPLC
Column : ProteoSil 200-C18 UHLC PEEK (1.9 µm, 50 x 2.1 mm I.D)
Eluent : A) 0.1% HCOOH in H_2O
B) 0.1% HCOOH in CH_3CN

Time (min)	B%
0	30
1.5	80
1.51	30
4.5	30

Flow Rate : 0.6 mL/min
Col. Temp. : 40 ℃
Detection : UV 280 nm
Injection Vol. : 10 µL
Sample : Protein

Peptide



Analyte:

1.	Gly-Tyr	50 mg/L
2.	Val-Tyr-Val	50 mg/L
3.	Angiotensin II	50 mg/L
4.	Methionine encephalin	50 mg/L
5.	Leucine encephalin	50 mg/L

Conditions

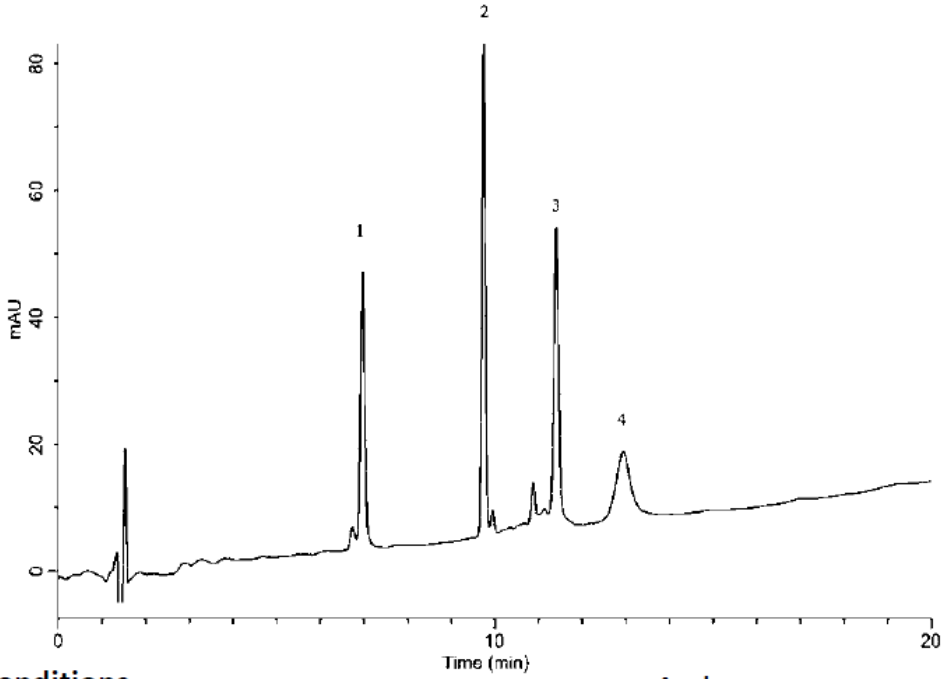
System : HPLC
Column : ProteoSil 200-C18 (1.9 µm, 100 x 2.1 mm I.D)
Eluent : A) 0.1% HCOOH in H_2O
B) 0.1% HCOOH in CH_3CN

Time(min)	B%
0	5
0.5	30
3.0	40
3.5	40
3.51	5
10.0	5

Flow Rate : 0.3 mL/min
Col. Temp. : 40 ℃
Detection : UV 280 nm
Injection Vol. : 5 µL
Sample : Protein

Applications

Analysis of Peptides and Proteins



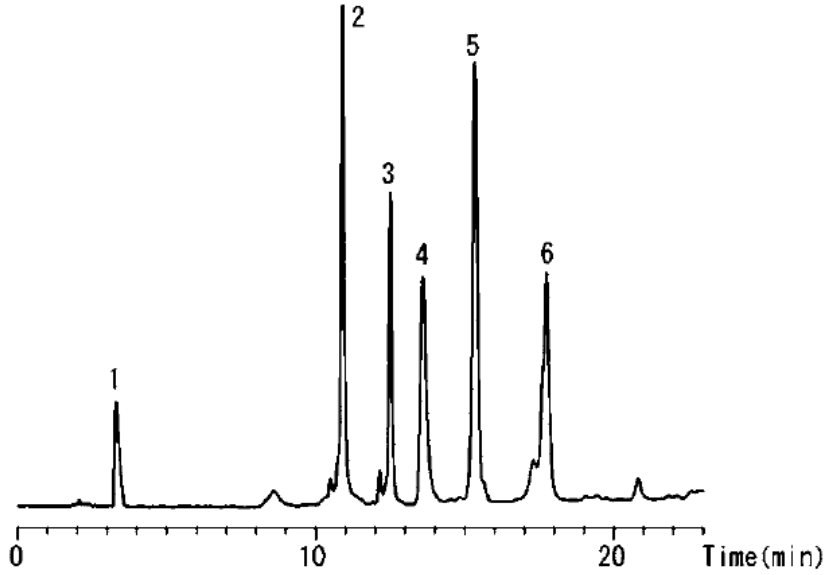
Conditions

Column	:	ProteoSil 200-C8 (5 µm, 150 x 4.6 mm I.D.)
Eluent	:	A) 0.1% TFA in CH_3CN
		B) 0.1% TFA in H_2O
		A/B = 20/80 – 20 min – 55/s45, v/v
Flow Rate	:	1.5 mL/min
Col. Temp.	:	40 °C
Detection	:	UV 220 nm
Injection Vol.	:	5 µL

Analyte

1. Ribonuclease A (0.2 mg/mL)
2. Insulin (0.2 mg/mL)
3. Lysozyme (0.2 mg/mL)
4. BSA (0.2 mg/mL)

Analysis of Protein (Proteosil 300-C8)



Conditions

Column	:	Proteosil 300-C8 (5 µm, 150 x 4.6 mm I.D.)
Eluent	:	A) CH_3CN/0.05 % TFA in H_2O = 80/20, v/v
		B) CH_3CN/0.05 % TFA in H_2O = 10/90, v/v
		A/B = 0/100 – 30 min – 100/0, v/v
Flow Rate	:	1.0 mL/min
Col. Temp.	:	30 °C
Detection	:	UV 280 nm
Injection Vol.	:	20 µL

Analyte

1. DL-Phenylalanine (1.01 mg/mL)
2. Cytochrome C (0.11 mg/mL)
3. Lysozyme (0.07 mg/mL)
4. BSA (0.21 mg/mL)
5. α-Chymotrypsinogen A (0.08 mg/mL)
6. Ovalbumin (0.30 mg/mL)

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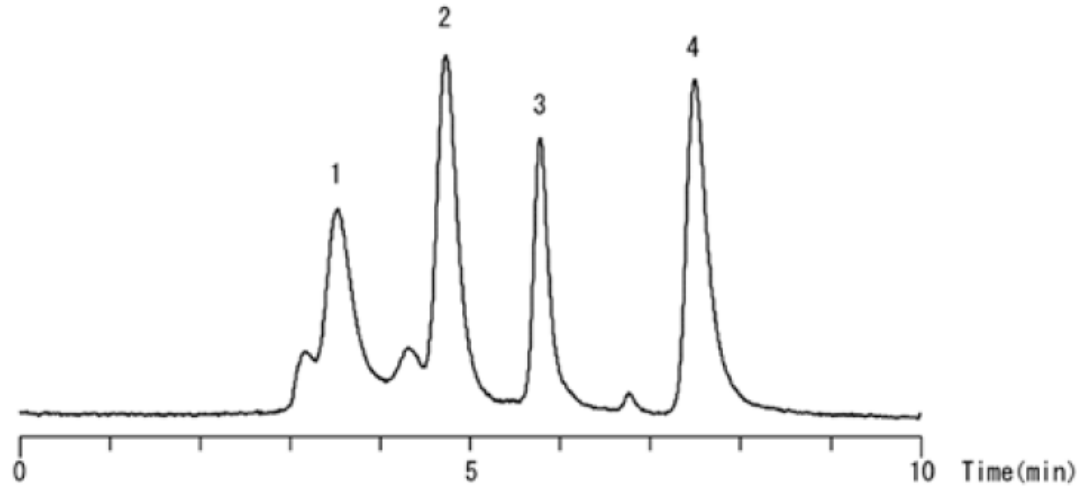
Analysis of Protein (Proteosil 300-SEC)



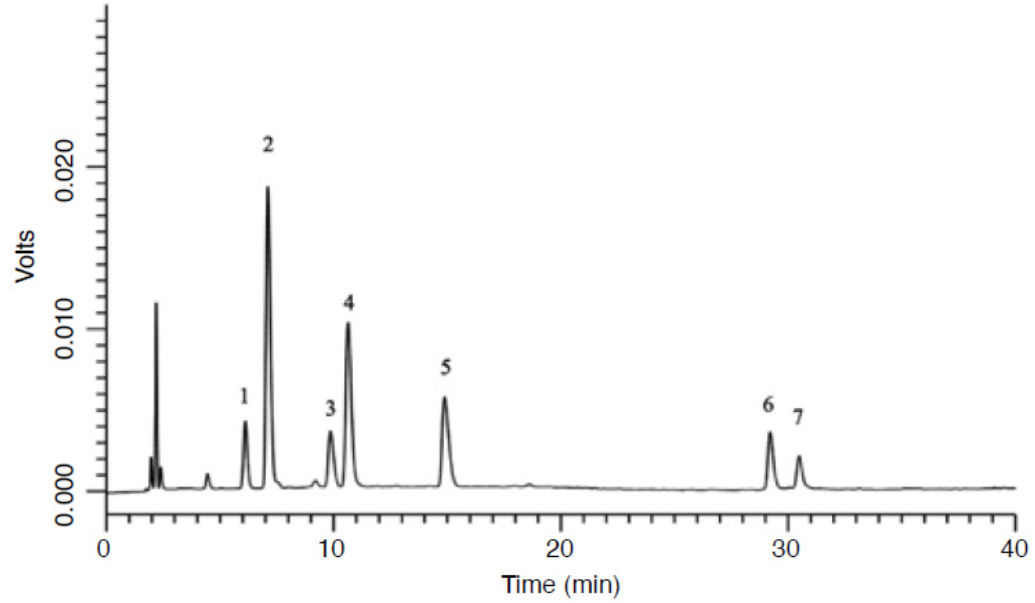
Conditions

Column	:	Proteosil 300-SEC (5 µm, 250 x 4.6 mm I.D.)
Eluent	:	0.1 M Na_2HPO_4 (pH 6.9, NaH_2PO_4)
Flow Rate	:	0.5 mL/min
Col. Temp.	:	30 °C
Detection	:	UV 220 nm
Injection Vol.	:	20 µL

Analyte

1. Thyrogloblin	(0.25 mg/mL)
2. BSA	(0.25 mg/mL)
3. Insulin Chain A	(0.25 mg/mL)
4. Oxytocin	(0.21 mg/mL)

Analysis of Peptides and Proteins



Conditions

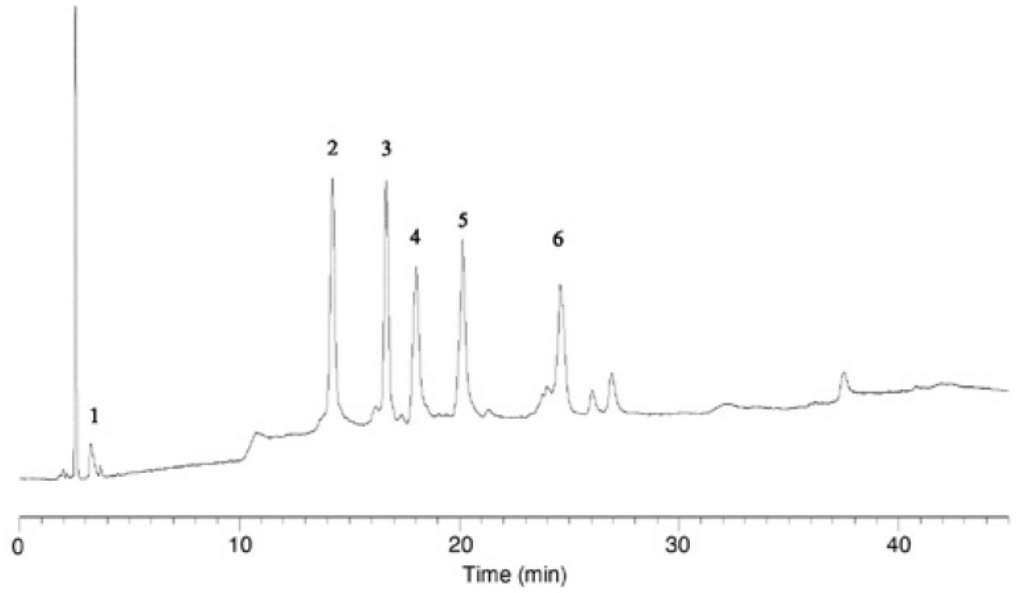
Column	:	ProteoSil 300-C18 (5 µm, 150 x 4.6 mm I.D.)
Eluent	:	A) 0.05% TFA in (CH_3CN/H_2O = 90/10, v/v)
		B) 0.05 % H_2O
		A/B = 20/80 – 40 min – 40/60, v/v
Flow Rate	:	1.0 mL/min
Col. Temp.	:	30 °C
Detection	:	UV 280 nm
Injection Vol.	:	20 µL

Analyte

1. Oxytocin	(0.05 mg/mL)
2. Methionine Enkephalin	(0.11 mg/mL)
3. Leucine Enkephalin	(0.11 mg/mL)
4. Angiotensin II	(0.05 mg/mL)
5. Angiotensin I	(0.16 mg/mL)
6. Insulin	(0.05 mg/mL)
7. Insulin Chain B	(0.10 mg/mL)

Applications

Analysis of Peptides and proteins (Proteosil 300-C18)



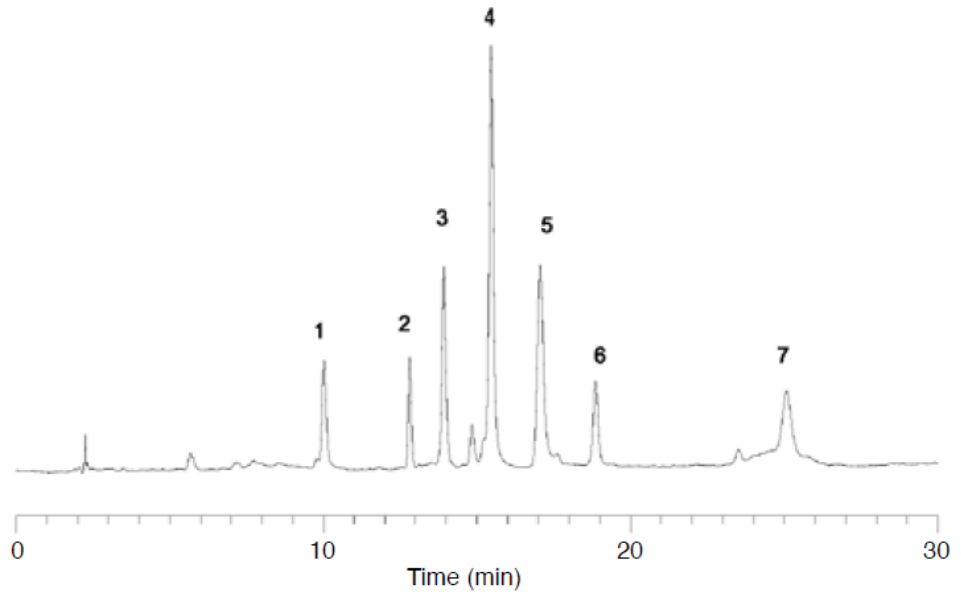
Conditions

Column	:	Proteosil 300-C18 (5 µm, 150 x 4.6 mm I.D.)
Eluent	:	A) CH_3CN/0.05 % TFA = 80/20, v/v
		B) CH_3CN/0.05 % TFA = 10/90, v/v
		A/B = 0/100 - 30 min - 100/0 - 10 min -100/0, v/v
Flow Rate	:	1.0 mL/min
Col. Temp.	:	30 °C
Detection	:	UV 280 nm

Analyte

1. DL-Phenylalanine	(FW 165)
2. Cytochrome C	(FW 13,000)
3. Lysozyme	(FW 14,000)
4. BSA	(FW 66,000)
5. α-Chymotrypsinogen A	(FW 25,600)
6. Ovalbumin	(FW 45,000)

Analysis of Peptides and proteins (Proteosil 300-C8)



Conditions

Column	:	Proteosil 300-C8 (5 µm, 150 x 4.6 mm I.D.)
Eluent	:	A) 0.1 % TFA in (CH_3CN/0.1 % TFA = 90/10, v/v)
		B) 0.1 % TFA
		A/B = 20/80 - 25 min - 60/40 - 5 min - 60/40, v/v
Flow Rate	:	1.0 mL/min
Col. Temp.	:	30 °C
Detection	:	UV 280 nm

Analyte

1. Ribonuclease A	(FW 13,700)
2. Insulin	(FW 6,000)
3. Cytochrome C	(FW 13,000)
4. Lysozyme	(FW 14,000)
5. BSA	(FW 66,000)
6. STI	(FW 21,000)
7. Ovalbumin	(FW 45,000)

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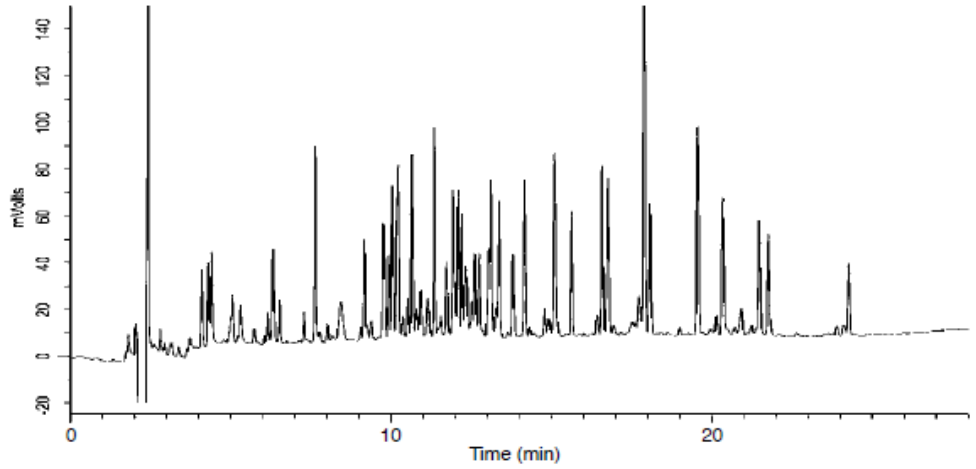
Applications

Analysis of BSA Digests



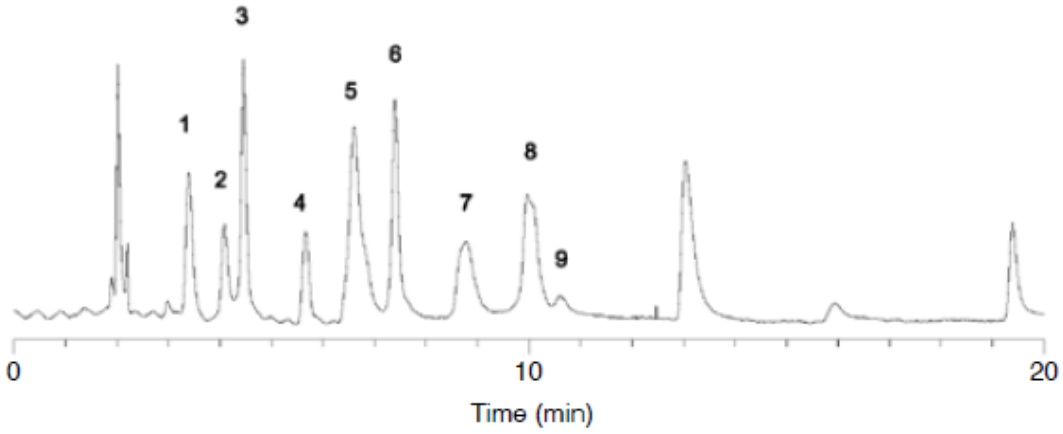
Conditions

Column : Proteosil 200-C18 (1.9 µm, 150 x 2.1 mm I.D.)
Eluent : A) 0.1% TFA in CH_3CN
B) 0.1% TFA in H_2O
A/B = 10/90 - 30 min - 50/50 - 0.1 min - 90/10 - 5 min - 90/10 - 0.1 min - 10/90 - 15 min
Flow Rate : 0.2 mL/min
Col. Temp. : 40 °C
Detection : UV 210 nm
Injection Vol. : 10 µL

Analyte

Tryptic Digest of BSA (0.5 mg/mL)

Analysis of Peptides and proteins (Proteosil 300-C4)



Conditions

Column : Proteosil 300-C4 (5µm, 150 x 4.6 mm I.D.)
Eluent : A) 0.2 % HCOOH in (CH_3CN/H_2O = 90/10, v/v)
B) 0.2 % HCOOH
A/B = 20/80 – 20 min – 80/20, v/v
Flow Rate : 1.0 mL/min
Col. Temp. : 30 °C
Detection : UV 280 nm

Analyte

1. Neurotensin	(FW 1673)
2. Leucin Enkephalin	(FW 556)
3. Cytochrome C	(FW 12,000)
4. Insulin	(FW 6,000)
5. BSA	(FW 66,000)
6. Myoglobin	(FW 17,000)
7. Creatine amidinohydrolase	(FW 43,000)
8. Ovalbumin	(FW 45,000)
9. Creatinine amidohydrolase	(FW 170,000)

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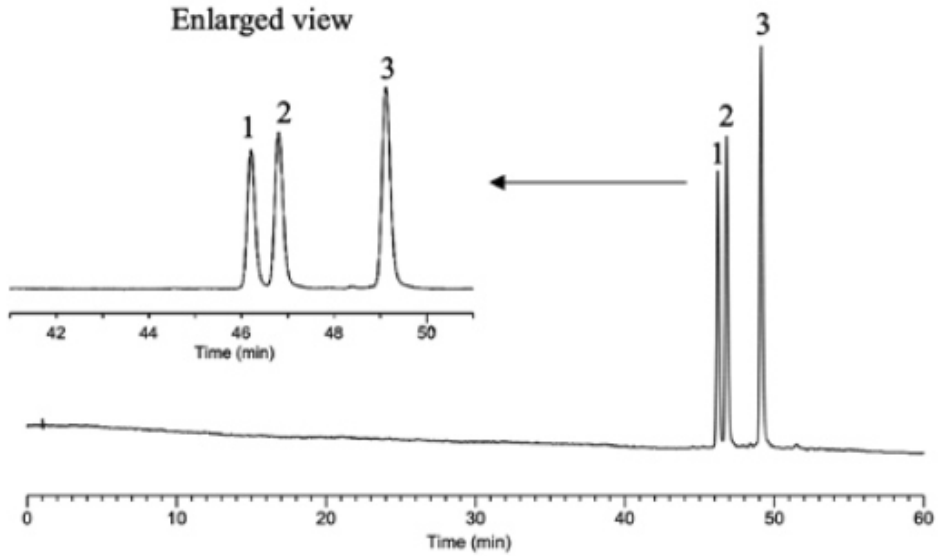
Applications

Analysis of Oligonucleotides



Conditions

Column	:	ProteoSil 200-C18 (3 µm, 100 x 3.0 mm I.D.)
Eluent	:	A) 5 mM TEAA in H_2O (pH 6.5)/CH_3CN = 80/20, v/v B) 5 mM TEAA in H_2O (pH 6.5) A/B = 5/95 – (60 min) – 50/50, v/v
Flow Rate	:	0.8 mL/min
Col. Temp.	:	40 °C
Detection	:	UV 260 nm
Injection Vol.	:	1 µL
Sample	:	Standard

Analyte

1. CATGACGTTCCTGATGCT (18 mer, M.W. 5465.61)
2. CCATGACGTTCCTGATGCT (19 mer, M.W. 5754.79)
3. TCCATGACGTTCCTGATGCT (20 mer, M.W. 6058.99)

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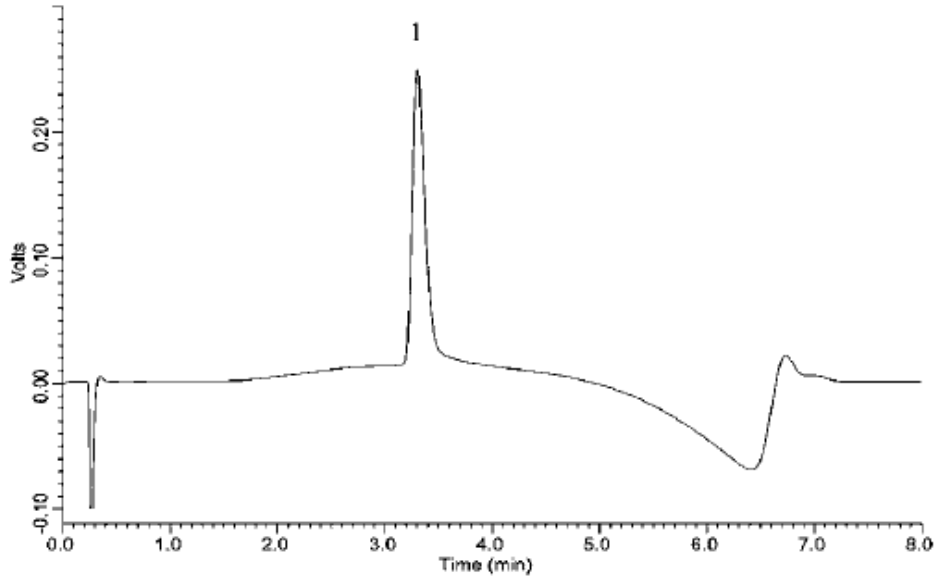
Applications

Analysis of IgG



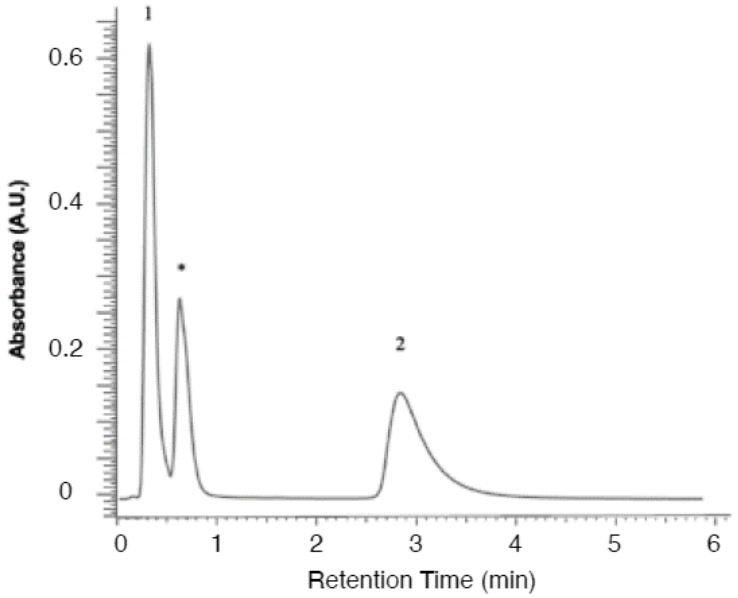
Conditions

Column Cat. No.	:	5020-10818
Column	:	MonoSelect RP-mAb (20 x 2.1 mm I.D.)
Eluent	:	A) 0.1%TFA in CH_3CN B) 0.1%TFA in H_2O A/B = 5/95 – 5 min – 90/10 – 0.1 min – 5/95 – 3
Flow Rate	:	0.3 mL/min
Col. Temp.	:	80 °C
Detection	:	UV 210 nm
Injection Vol.	:	5 µL
Sample	:	Standard

Analyte

1. IgG 0.1 mg/mL

Analysis of Abraxane



Conditions

Column	:	MonoSelect nPEC (50 x 3.0 mm I.D.)
Column Cat. No.	:	5020-10816
Eluent	:	A) CH_3OH B) 50 mM Na_2SO_4 in 20 mM Acetate buffer (pH 4.6) A/B = 30/70, v/v
Flow Rate	:	1.0 mL/min
Col. Temp.	:	Room temperature (approx. 25 °C)
Detection	:	UV 260 nm
Injection Vol.	:	10 µL

Analyte

1. Abraxane (Nanoparticle albumin–bound paclitaxel)
2. Paclitaxel

* Unknown peak

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