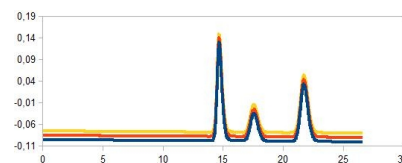
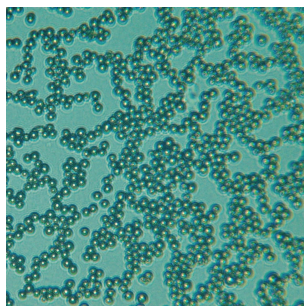


GPC / SEC / HPLC Columns

Made by AppliChrom GmbH



AppliChrom SuperOH-P

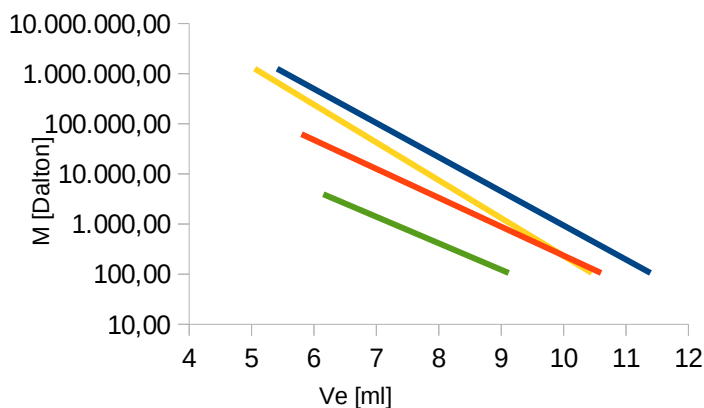


AppliChrom SuperOH-P

- optimized for aqueous GPC/SEC-separations
- aqueous high hydrophilic polymeric base material
- low column bleeding for low detector noise
- 7 μ particle technology (standard) for high platecounts and high resolution^{*)}
- large pore volume for high resolution
- pH stable 2.5-12
- pressure stability 30-80bar (depending on poresize)
- temperature stability 10-85°C
- individual poresizes for individual molecular weight ranges
- multi-pore technology for broad range of molecular size
- increased lifetime of GPC/SEC columns by combination of proprietary particle- and packing technology
- service-applicationcenter for methodscreening available in Oranienburg (Germany / Europe)

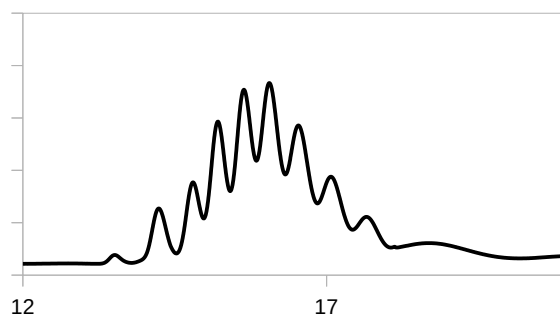
^{*)} 7 μ Particletechnology is standard for the small porous series – 100 and – 200.

GPC Calibration Curves AppliChrom SuperOH-P

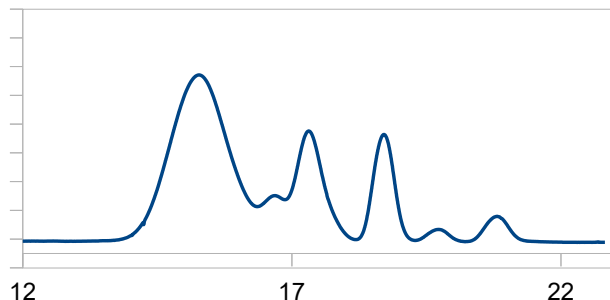


Analyte: PEO/PEG

Column: AppliChrom SuperOH-P-100
AppliChrom SuperOH-P-200
AppliChrom SuperOH-P-300
AppliChrom SuperOH-P-400
Dimension: e.a. 300mm x 8mm
Mobil Phase: H₂O
Flow: 0.5ml/min
Temperature: 20°C
Detection: RI
Injection: 20 μ l sample

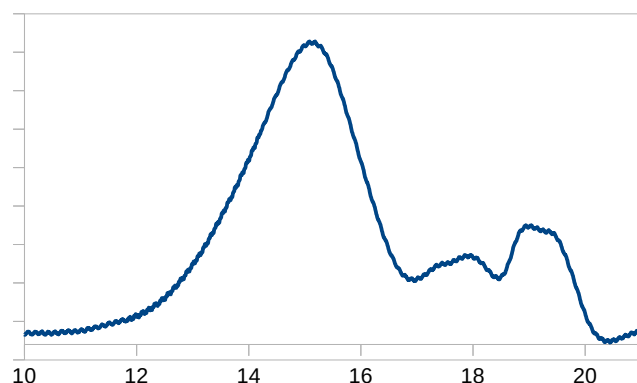


For aqueous applications



Analyte: Oligosaccharide

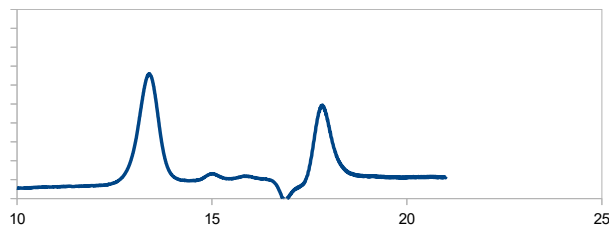
Column: AppliChrom ABOASuperOH-P-100
Dimension: 2x 300mm x 8mm
Mobil Phase: H₂O
Flow: 0.5ml/min
Temperature: 40°C
Detection: RI
Injection: 20µl sample



Analyte: Pectin

sample with high content of oligomers

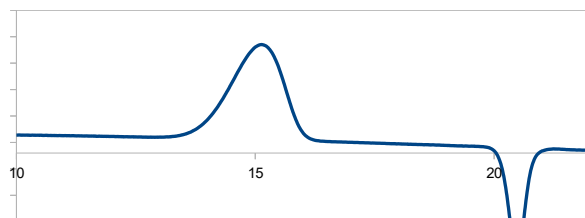
Column: AppliChrom ABOASuperOH-P-100
AppliChrom ABOASuperOH-P-350
Dimension: e.a. 300mm x 8mm
Mobil Phase: H₂O, NaKHPO₄ (pH 6.8, 0.07M) + 50mM NaCl
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample



Analyte: PEGylated protein

Separation of an approx. 5.000Da product of a PEGylated protein of approx. 100.000dalton.

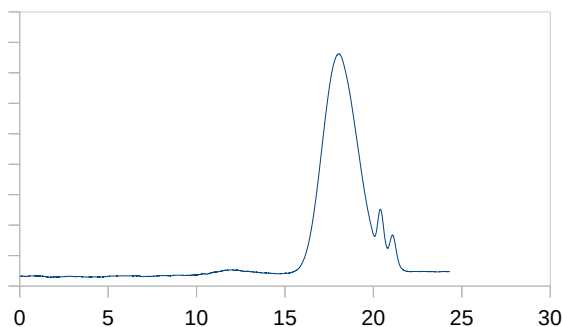
Column: AppliChrom ABOASuperOH-P-100
AppliChrom ABOASuperOH-P-350
Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.05% NaN₃ in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample



Analyte: Starch hydrolysate

analysis of a 100 000Da fraction

Column: AppliChrom ABOASuperOH-P-100
AppliChrom ABOASuperOH-P-350
Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.2M NaNO₃ in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample



Analyte:

Inulin

analysis of a 100Da- 1 000 000Da,
including oligomer separation

Column:

AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension:

e.a. 300mm x 8mm

Mobil Phase:

0,075M NaNO₃, 5g/l Na₂HPO₄·x7H₂O in H₂O

Flow:

1.0ml/min

Temperature:

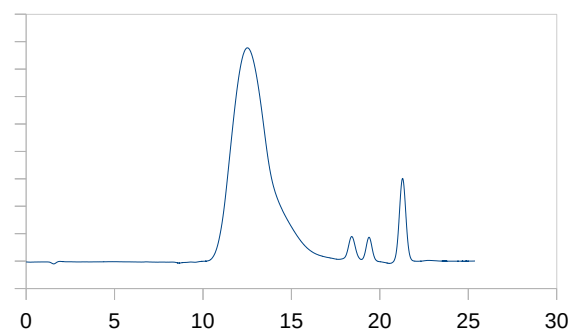
20°C

Detection:

RI

Injection:

20µl sample



Analyte:

Hyaluronic acid

including oligomer separation

Column:

AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension:

e.a. 300mm x 8mm

Mobil Phase:

0.075M NaNO₃, 5g/l Na₂HPO₄·x7H₂O in H₂O

Flow:

1.0ml/min

Temperature:

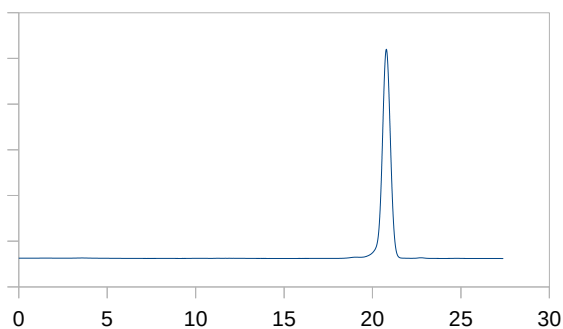
20°C

Detection:

RI

Injection:

20µl sample



Analyte:

Corn syrup

analysis of a 100Da- 1 000 000Da area

Column:

AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension:

e.a. 300mm x 8mm

Mobil Phase:

H₂O

Flow:

1.0ml/min

Temperature:

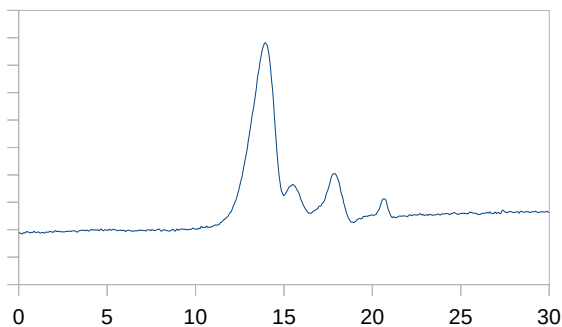
20°C

Detection:

RI

Injection:

20µl sample



Analyte:

**Water-based acrylate
dispersion**

analysis of a 100Da- 1 000 000 area

Column:

AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension:

e.a. 300mm x 8mm

Mobil Phase:

1.0M NaNO₃ in H₂O

Flow:

1.0ml/min

Temperature:

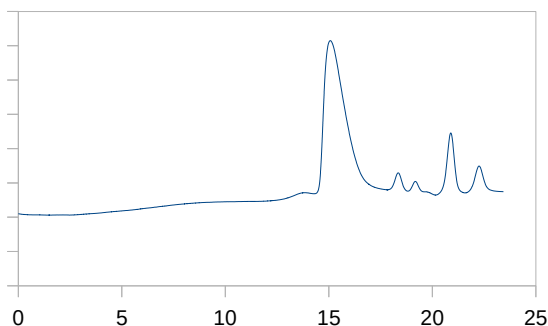
20°C

Detection:

RI

Injection:

20µl sample

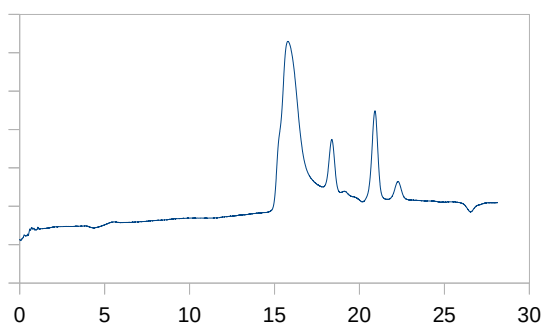


Analyte: Heparin-Na, 8-25kDa

including oligomer separation

Column: AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.075M NaNO₃, 5g/l Na₂HPO₄·x7H₂O in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample

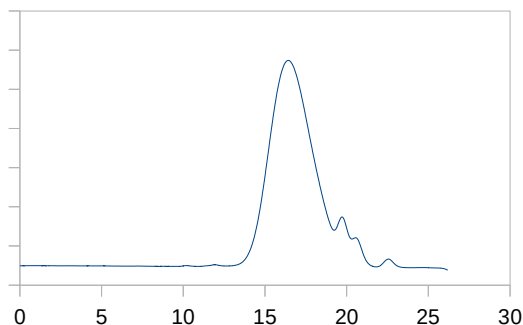


Analyte: Dextran sulfate-Na

analysis of a 100Da- 1 000 000Da area

Column: AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.075M NaNO₃, 5g/l Na₂HPO₄·x7H₂O in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample

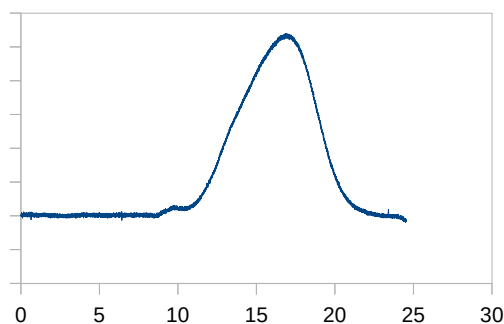


Analyte: Alginate-Na

analysis of a 100Da- 1 000 000Da area

Column: AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.075M NaNO₃, 5g/l Na₂HPO₄·x7H₂O in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample

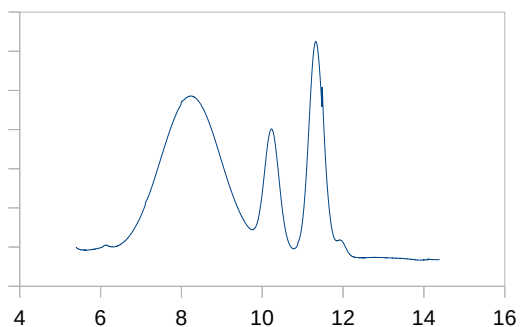


Analyte: Carrageenan

analysis of a 1.000Da- 5 000 000 Da area

Column: AppliChrom ABOASuperOH-P-350
AppliChrom ABOASuperOH-P-450

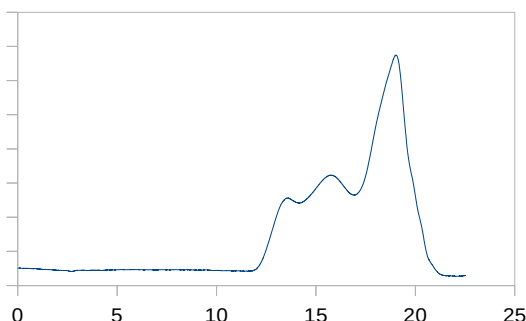
Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.075M LiNO₃ in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample



Analyte: **Pullulan**
including oligomer separation

Column: AppliChrom ABOASuperOH-P-Multipore

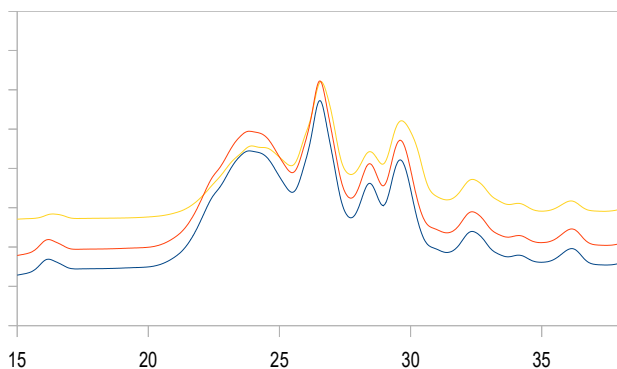
Dimension: 300mm x 8mm
Mobil Phase: 0.075M NaNO₃ in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample



Analyte: **Maltodextrin 12**
analysis of a 100Da-1 000 000Da area

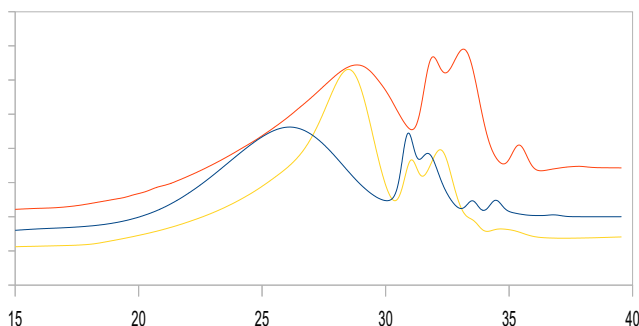
Column: AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.075M NaNO₃ in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample



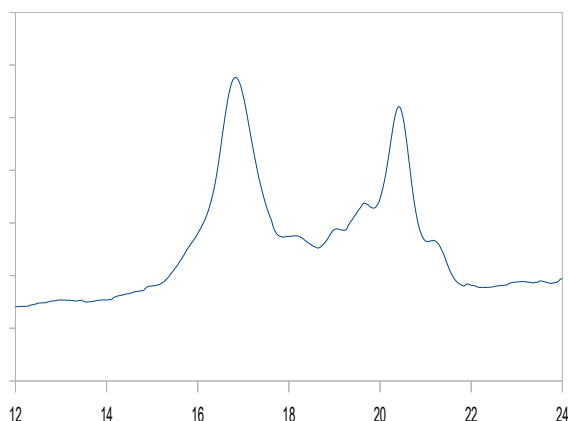
Analyte: **Fish protein hydrolysates**
3 different batches
analysis of a 100Da-70 000 Da area
including oligomer separation

Column: AppliChrom ABOASuperOH-P-250
Dimension: 3x 300mm x 8mm
Mobil Phase: 0.05M NaNO₃ + 0,07M Na_{1,5}H_{1,5}PO₄ in H₂O
Flow: 1.0ml/min
Temperature: 30°C
Detection: RI
Injection: 20µl sample



Analyte: **Polycarboxylate ether**
3 different batches

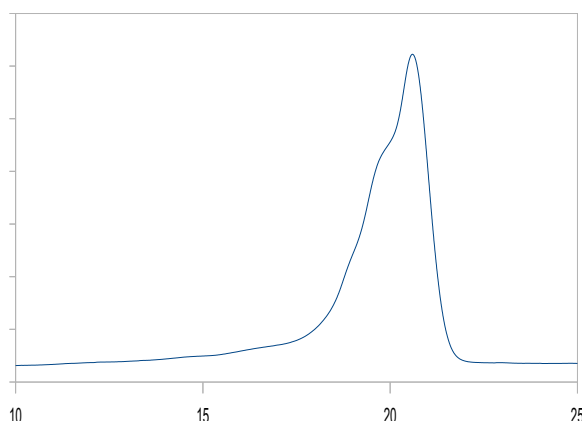
Column: AppliChrom ABOASuperOH-P-350
Dimension: 3x 300mm x 8mm
Mobil Phase: 0.1M NaNO₃ + 0,05M Na₂HPO₄ in H₂O
Flow: 1.0ml/min
Temperature: 20°C
Detection: RI
Injection: 20µl sample



Analyte: Water-soluble casein fraction

Column: AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

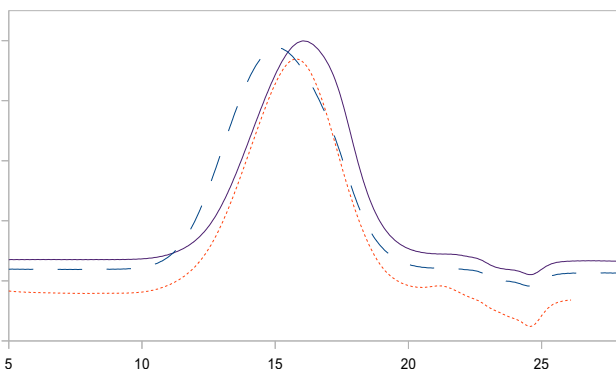
Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.01M $\text{Na}_{1.5}\text{H}_{1.5}\text{PO}_4$ & 0.3M NaCl in H_2O
Flow: 1.0ml/min
Temperature: 30°C
Detection: RI
Injection: 50µl sample



Analyte: Jelly Bean „Gummibärchen“

Column: AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

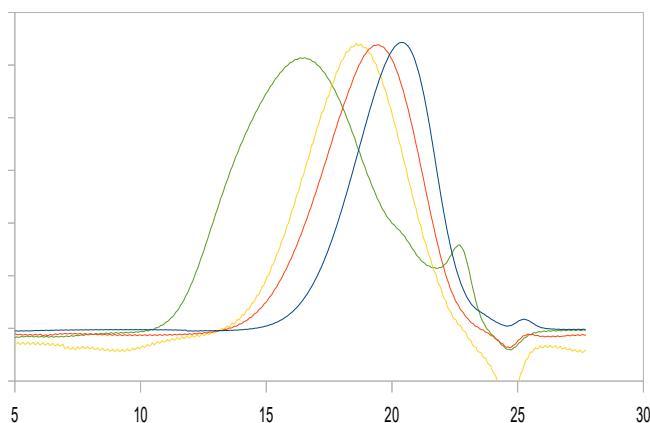
Dimension: e.a. 300mm x 8mm
Mobil Phase: 0.01M $\text{Na}_{1.5}\text{H}_{1.5}\text{PO}_4$ & 0.3M NaCl in H_2O
Flow: 1.0ml/min
Temperature: 50°C
Detection: RI
Injection: 20µl sample
Ingredient according to label: 6.9% protein (gelatin) dissolved in the eluent



**Analyte: Polyvinyl alcohols,
88% degree of hydrolysis**
3 different batches
including oligomer separation

Column: AppliChrom ABOASuperOH-P-350

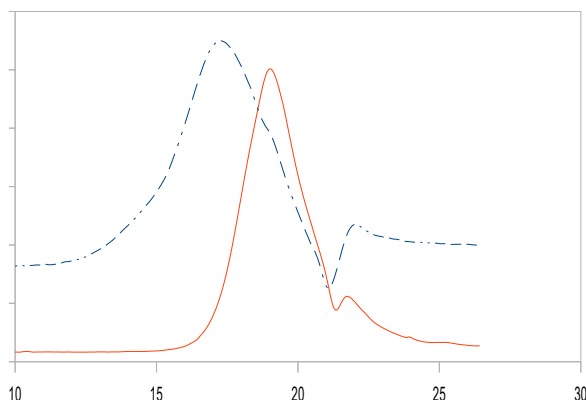
Dimension: 2x 300mm x 8mm
Mobil Phase: 0.05M Na_2HPO_4 + 0.1M NaNO_3 in H_2O
Flow: 1.0ml/min
Temperature: 30°C
Detection: RI
Injection: 20µl sample



Analyte: PVP, polyvinyl pyrrolidone
3 different batches
including oligomer separation

Column: AppliChrom ABOASuperOH-P-350

Dimension: 2x 300mm x 8mm
Mobil Phase: 0.1M NaNO_3 in H_2O + 20% ACN
Flow: 1.0ml/min
Temperature: 30°C
Detection: RI
Injection: 50µl sample
PVP ($M = 8.3 / 23.4 / 33.7 / 175\text{kDa}$)
dissolved in the eluent



Analyte:

Pork gelatin vs. gelatin from collagen hydrolysate
including oligomer separation

Column:

AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension:

e.a. 300mm x 8mm

Mobil Phase:

0.01M $\text{Na}_{1.5}\text{H}_{1.5}\text{PO}_4$ & 0.3M NaCl in H_2O

Flow:

1.0ml/min

Temperature:

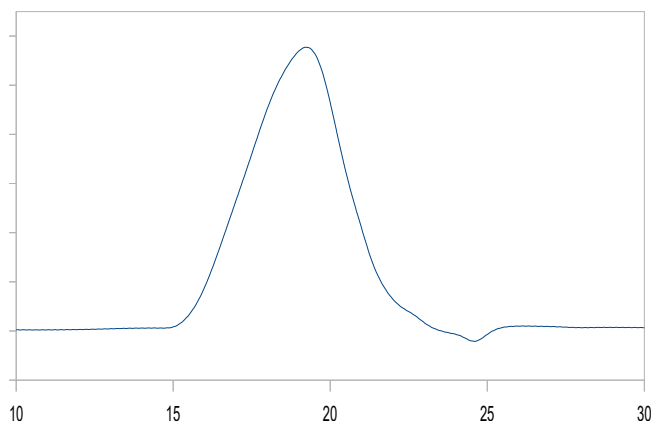
30°C

Detection:

RI

Injection:

ea. 50µl sample
Pork gelatine (blue- - - -),
Gelatin from collagen hydrolyzate (red ----)



Analyte:

Pork gelatin

analysis of a 100Da- 1Mio Da,

Column:

AppliChrom ABOASuperOH-P-250
AppliChrom ABOASuperOH-P-350

Dimension:

e.a. 300mm x 8mm

Mobil Phase:

0.075M NaNO_3 , 5g/l $\text{Na}_2\text{HPO}_4 \cdot 7\text{H}_2\text{O}$ in H_2O

Flow:

1.0ml/min

Temperature:

20°C

Detection:

RI

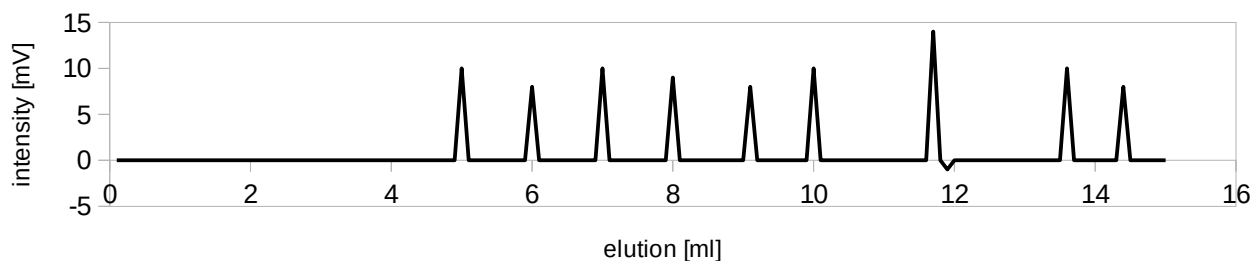
Injection:

20µl sample

I=> GPC/SEC
K = 0

<=I I=> HPLC
K = 1

K > 1



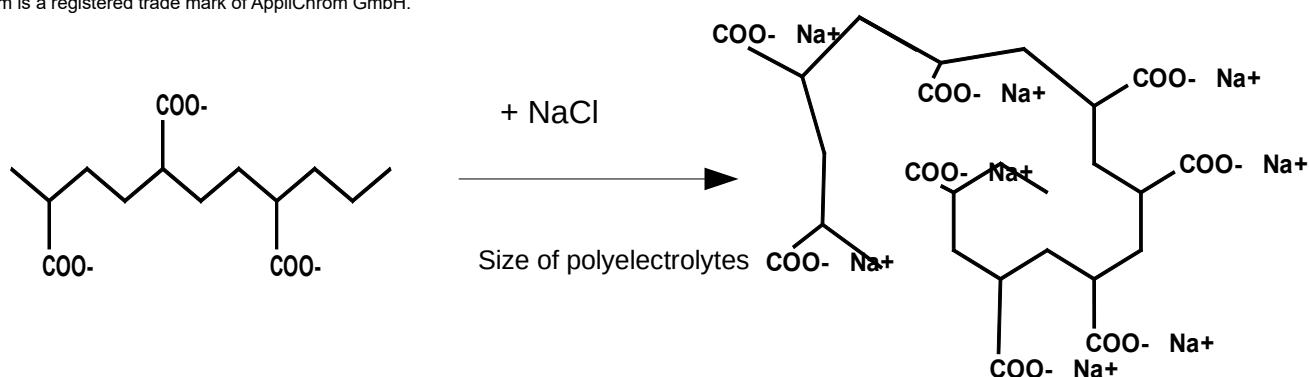
GPC/SEC – Separation by size (ΔS) || **HPLC** – Separation according to bond strength (ΔH)
K = Partition coefficient

GPC/SEC finishes when HPLC begins

AppliChrom SuperOH-P

Catalog #	Description	Dimension	Separation Range
SASOH1002508 SASOH1003008 SASOH100508 SASOH100308	AppliChrom SuperOH-P-100	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da-2 500Da
SASOH2002508 SASOH2003008 SASOH200508 SASOH200308	AppliChrom SuperOH-P-200	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da-20 000Da
SASOH2502508 SASOH2503008 SASOH250508 SASOH250308	AppliChrom SuperOH-P-250	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da-70 000Da
SASOH3002508 SASOH3003008 SASOH300508 SASOH300308	AppliChrom SuperOH-P-300	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	1 000Da-300 000Da
SASOH3502508 SASOH3503008 SASOH350508 SASOH350308	AppliChrom SuperOH-P-350	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	2 500Da-1 000 000Da
SASOH4002508 SASOH4003008 SASOH400508 SASOH400308	AppliChrom SuperOH-P-400	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	10 000Da-5 000 000Da
SASOH4502508 SASOH4503008 SASOH450508 SASOH450308	AppliChrom SuperOH-P-450	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	50 000Da→10 000 000Da
SASOHS2508 SASOHS3008 SASOHS508 SASOHS308	AppliChrom SuperOH-P-Multipore	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da –1 000 000Da

AppliChrom is a registered trade mark of AppliChrom GmbH.



A general guarantee for the functionality with all analytes cannot be given. In individual cases, it is always advisable to discuss the issue with our product specialists. An application laboratory is also available in Oranienburg for your service. Please contact us.

Errors and changes excepted. Research and development products.

Not tested for clinical, diagnostic, or food use.

Version 11/2021

Inquiry Form For Forwarding to AppliChrom GmbH

To place an order please fill in this form and send it by mail or fax to:

AppliChrom GmbH
Germendorfer Allee 20
D-16515 Oranienburg
Germany

Telephone: +49 (0)3301 579293
Fax: +49 (0)3301 209879
Email: info@applichrom.co
Web: www.applichrom.com

Catalog	Description	Dimension

bulk quantities on request

address

name

company / institute

address

country

telephone number

e-mail

VAT-number

comment

AppliChrom GmbH

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info@applichrom.com

AppliChrom
Excellent results are our aim



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