

GROM



FROM NANO - TO PREPARATIVE HPLC

SAPPHIRE

HIGH

- QUALITY
- SELECTIVITY
- SPEED
- FLEXIBILITY

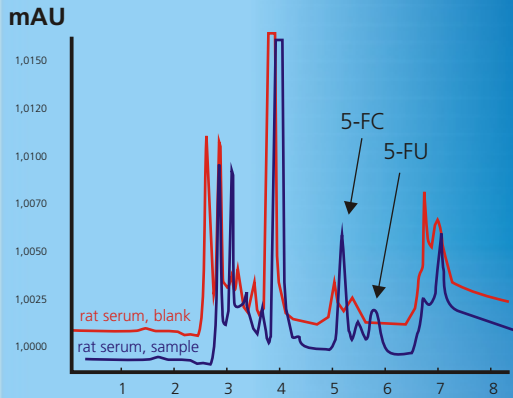


WWW.GROM.DE

HIGH SELECTIVITY

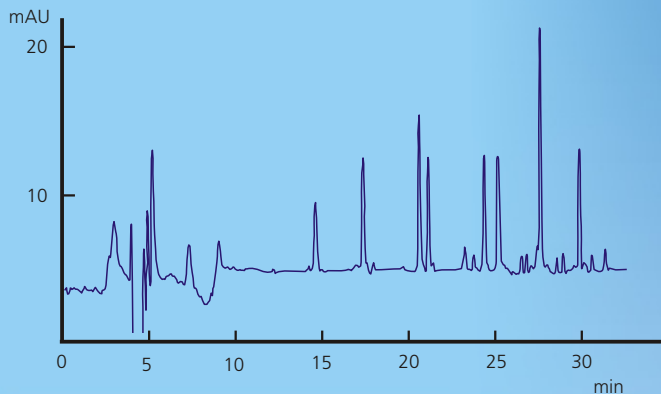
Analysis of serum

Control of the transformation of 5-fluoro-cytosin to 5-fluoro-uracil in a gene suicide therapy with transgenic rats



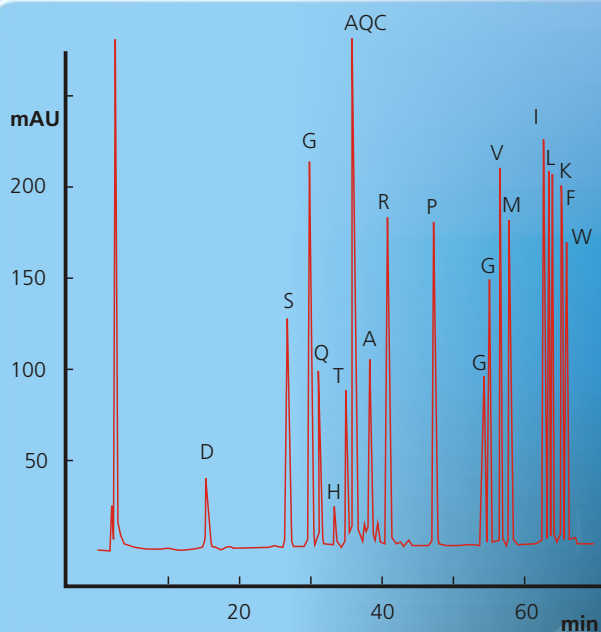
Stationary phase: GROM Sapphire 110 C8, 5 μ m
Column size: 250 mm x 2.0 mm
Part No: GSOC50511S2502
Eluent: 40 mM K-phosphate pH 7.0
Flow: 250 μ L/min
Temperature: 21° C
Detection (UV): 266 nm
Injection: 15 μ L
Sample: rat serum, blank (red)
 rat serum, sample (blue)

Tryptic digest of Cytochrom C



Stationary phase: GROM Sapphire 110 C18, 5 μ m
Column size: 150 x 0.075 mm
Part No: GSODS0511C1508
Eluent A: H₂O + 0,05% TFA
Eluent B: ACN + 0,05% TFA
Gradient: 5 - 60% B (0 - 30 min)
Flow: 300 nL/min
Detection (UV): 215 nm
Injection: 100 nL = 7 pMol

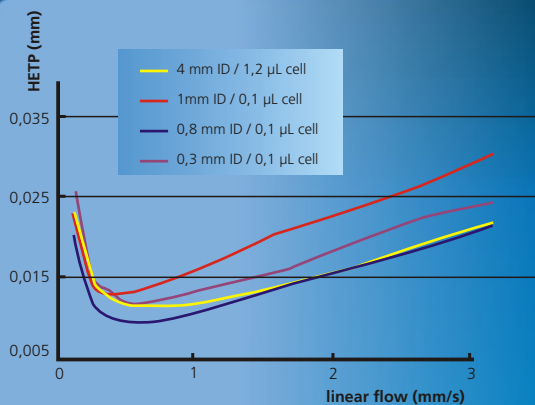
Amino Acid Analysis



High sensitive Amino Acid Analysis by capillary HPLC
 - employing precolumn derivatisation with 6-amino chinolyI-N-hydroxysuccinimidyl carbamat (AQC)

Stationary phase: GROM Sapphire 110 C18, 3 μ m
Column size: 150 x 0.30 mm
Part No: GSODS0311C1530
Eluent A: 50 mM Na-acetate pH 5.75
Eluent B: 70 % ACN - 50 mM Na-acetate pH 6.0 (v/v)
Gradient: 2 - 10% B (0 - 30 min), 10 - 60 % B (30 - 80 min)
Flow (lin. vel.): 0.80 mm/s
Temperature: 45° C
Detection (UV): 254 nm
Flow cell: 10 mm /35 nL
Injection: 150 nL
Sample: standard (~ 10 pMol of each amino acid)

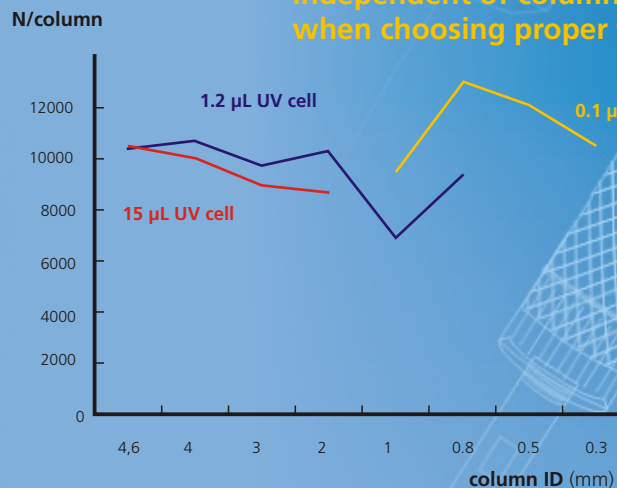
Optimal flow independent of column ID



Stationary phase: GROM Sapphire 110 C18, 5 µm
Length: 125 mm
Eluent: H₂O : ACN, 20 : 80
Temperature: RT
Detection (UV): 254 nm
Injection: 0.04 - 0.5 µL
Sample: pentylbenzoate (~ 18,5 - 50 µg/mL)

Column efficiency

independent of column inner diameter when choosing proper flow cell



HIGH

FLEXIBILITY

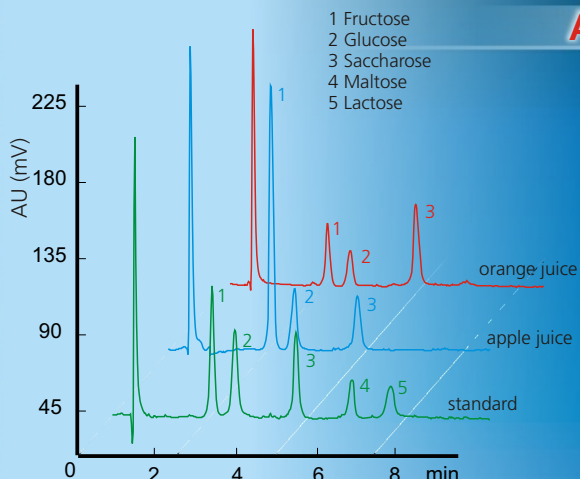
Particle size 1.5 to 50 µm - column dimensions from 50 µm to 10 cm ID, i.e. any dimension required

GROM Sapphire stationary phases

		Pore size [Å]	Particle size [µm]	Surface area [m ² /g]	Carbon content %C	Pore volume [mL/g]
GROM Sapphire	C18	65	5	500	23	0.9
	C18	110	3	270	16	1.1
	C18	110	5	270	16	1.1
	C18	300	5	120	7	1.0
GROM Sapphire	C8	65	5	500	15	0.9
	C8	110	3	270	10	1.1
	C8	110	5	270	10	1.1
	C8	300	5	120	4	1.0
GROM Sapphire	C4	65	5	500	10,5	0.9
	C4	110	5	270	7	1.1
	C4	300	5	120	2	1.0
GROM Sapphire	NH ₂	65	5	500	5,5	0.9
	NH ₂	110	5	270	4	1.1
GROM Sapphire	CN	65	5	500	10	0.9
	CN	110	5	270	7	1.1
GROM Sapphire	Phenyl	65	5	500	15	0.9
GROM Sapphire	Diol	65	5	500	5	0.9
	Diol	110	5	270	4	1.1
	Diol	200	5	150	2,8	1.0
	Diol	300	5	120	2,2	1.0
GROM Sapphire	Si	65	5	500	-	0.9
	Si	110	5	270	-	1.1

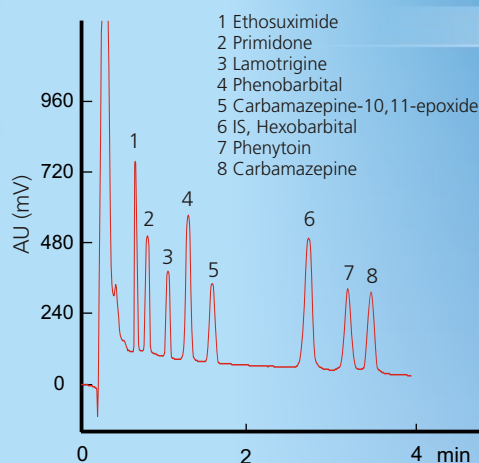
HIGH SPEED

Analysis of beverages



Column phase: GROM Sapphire, 65 NH₂, 5µm
Column size: 125 x 4.0 mm
Part No: GSNHS0507S1204
Eluent: H₂O / ACN 25 / 75
Flow: 2.0 mL/min
Pressure: 8.0 MPa
Detection: RI
Injection: 50 µL standard
5 µL apple juice
5 µL orange juice

Separation of antiepileptics

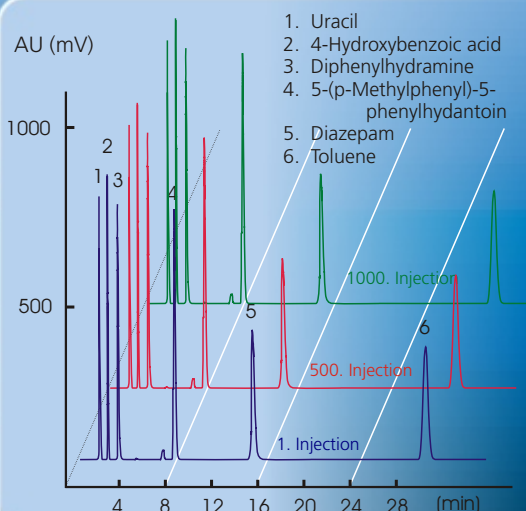


Column phase: GROM Sapphire 110 C18, 5µm
Column size: 53 x 4.0 mm
Part No: GSODS0511S0604
Eluent: 50 mM Na-phosphate, pH 6.5 / MeOH / ACN = 62 / 23 / 15
Flow: 1.5 mL/min
Pressure: 6.0 MPa
Detection (UV): 204 nm
Injection: 3 µL serum calibration standard (CHROMSYSTEMS) + IS Hexobarbital

HIGH QUALITY

Stability of GROM Sapphire Packings (Daldrup)

Column phase: GROM Sapphire 110 C18, 5 µm
Column size: 125 x 4 mm
Part No: GSODS0511S1204
Eluent: 50 mM Na-phosphate, pH 2.3 / ACN = 58 / 42
Flow rate: 1 mL/min
Pressure: 8.0 MPa
Temperature: RT
Detection (UV): 230 nm
Injection: 10 µL (1-100 mg/ml of each)



grom