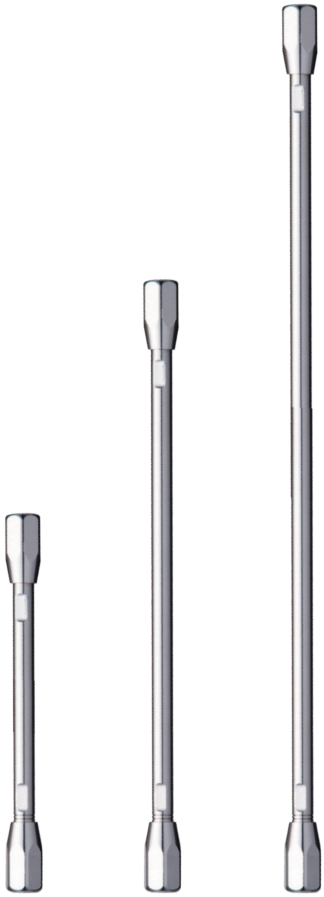
GL Sciences

HPLC, LC/MS Columns

InertSustain C30

InertSustain C30 is an HPLC column in which triacontyl groups are chemically bonded to silica gel. This column has high stereoselectivity and excellent separation ability for isomers and structually similar compounds with high lipophilicity.



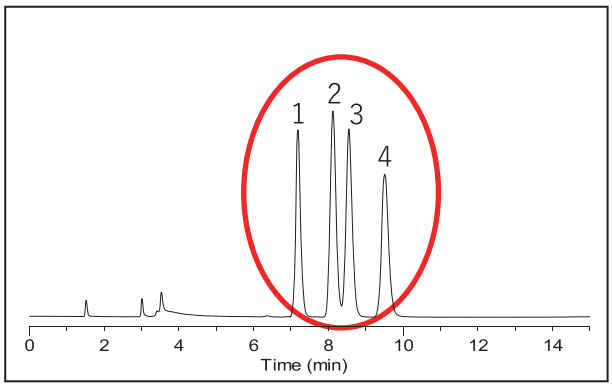
Specification

Base Material	: High Purity ES Silica Gel
Particle Size	: 3 µm, 5 µm
Surface Area	: 200 m²/g
Pore Size	: 200 Å (20nm)
Functional Group	: Triacontyl
End-capping	: Yes
Carbon Loading	: 18.5 %
USP Code	: L62
pH Range	: 1 - 7.5

Unique Separat ion Patterns from ODS Columns

InertSustain C30 can also separate components that are difficult to be separate with high carbon content ODS.

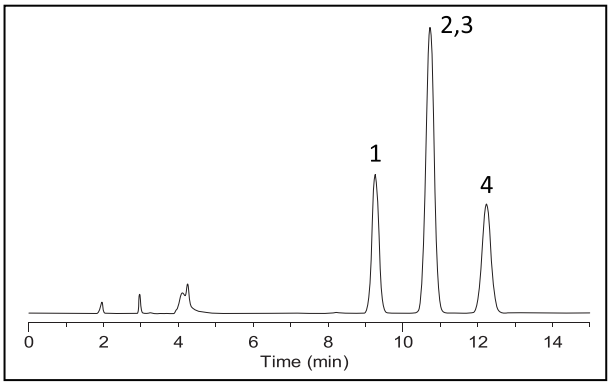
InertSustain C30



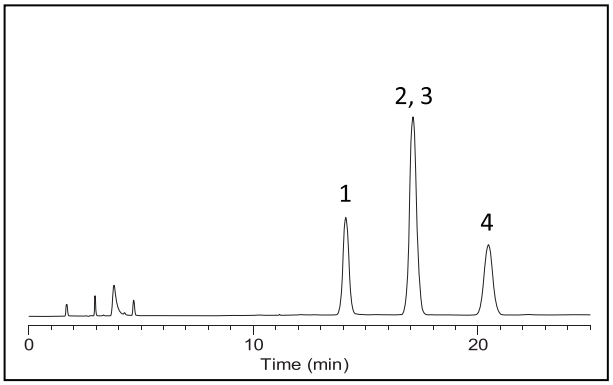
Condition

Column Size	: 5 µm, 250 x 4.6 mm I.D.
Eluent	: CH_3OH
Flow Rate	: 1.0 mL/min
Col. Temp.	: 25 ℃
Detection	: UV 210 nm
Injection Vol.	: 5 µL
Sample	: Standard
Analyte	: 1. δ-tocopherol 2. γ-tocopherol 3. β-tocopherol 4. α-tocopherol Conc. 50 mg/L each

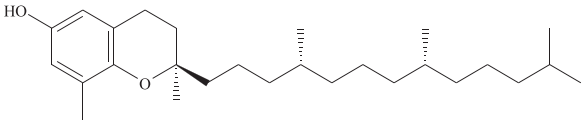
InertSustain C18



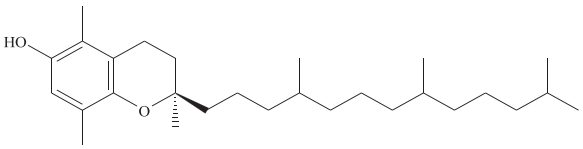
Inertsil ODS-HL



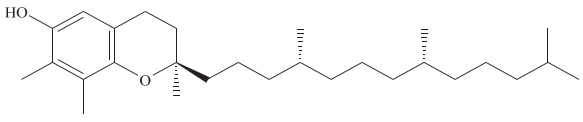
1. delta-tocopherol



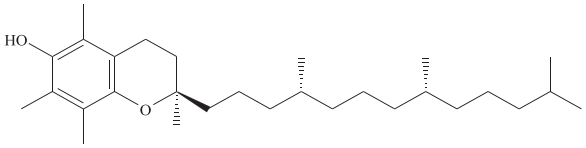
3. beta-tocopherol



2. gamma-tocopherol



4. alpha-tocopherol

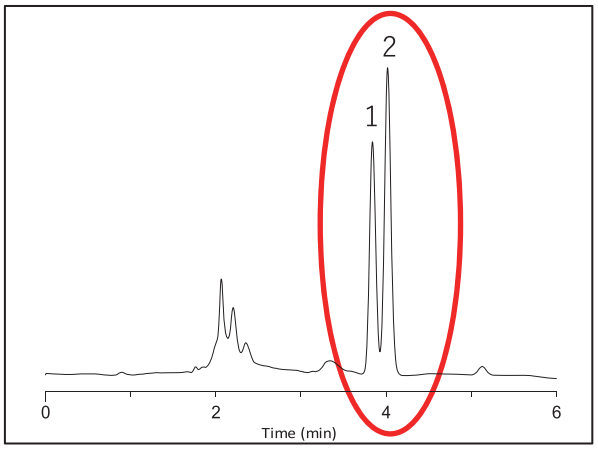


Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

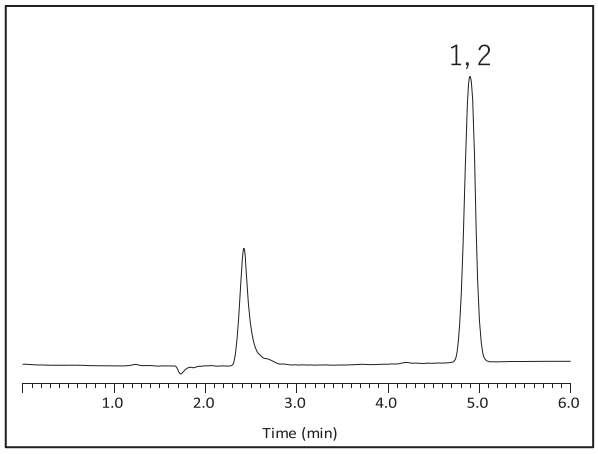
High Stereoselectivity, Ideal for Separation of Isomers and Similar Compounds

InertSustain C30 exhibits excellent performance in separating compounds with high lipid solubility, including isomers and compounds with similar structures.

InertSustain C30



InertSustain C18



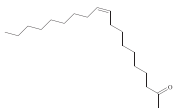
Conditions

Column Size	: 5 µm, 150 x 4.6 mm I.D.
Eluent	: CH_3OH
Flow Rate	: 1.0 mL/min
Col. Temp.	: 40 ℃
Detection	: UV 210 nm
Injection Vol.	: 2 µL

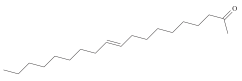
Analyte :
1. 18:1(cis, n-9) methyl ester
2. 18:1(trans, n-9) methyl ester

each 500 mg/L in CH3OH

1. 18:1(*cis*, *n*-9) methyl ester

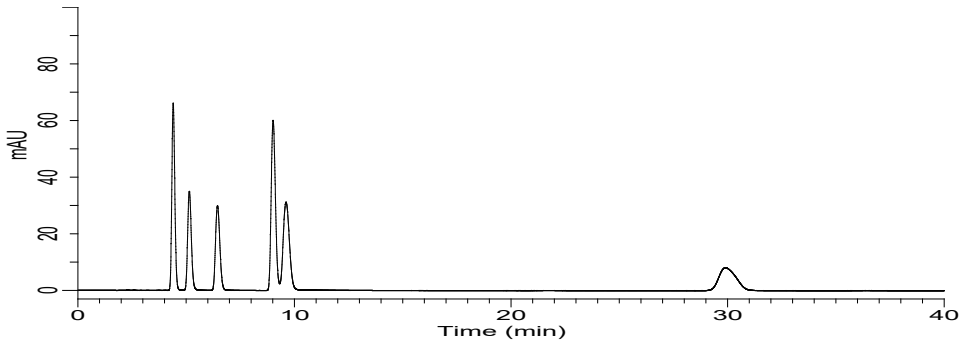


2. 18:1(*trans*, *n*-9) methyl ester



Can be used with 100% aqueous eluent

InertSustain C30 is also effective for hydrophilic compounds under water-rich conditions that are difficult with conventional ODS columns.



Conditions

System	: Chromaster HPLC system
Column Size	: 5 µm, 250 x 4.6 mm I.D.
Eluent	: 20 mM K_2HPO_4 in H_2O (pH7.0, H_3PO_4)
Flow Rate	: 1.5 mL/min
Col. Temp.	: 40 °C
Detection	: UV 260 nm
Injection Vol.	: 10 µL
Sample	: Standard

Analyte		
: 1. 5'-IMP	100 mg/L
2. 5'-AMP	100 mg/L
3. 5'-ADP	100 mg/L
4. Hypoxanthine	100 mg/L
5. 5'-ATP	100 mg/L
6. Inosine	100 mg/L

Product List

Analytical Columns

	Length/Inner diameter (mm)	2.1	3.0	4.6
Particle size: 3 µm HP 50MPa (500 bar)	50	5020-17174	5020-17178	5020-17182
	100	5020-17175	5020-17179	5020-17183
	150	5020-17176	5020-17180	5020-17184
	250	5020-17177	5020-17181	5020-17185

	Length/ID (mm)	2.1	3.0	4.0	4.6
Particle size: 3 µm	50	5020-17158	5020-17162	5020-17166	5020-17170
	100	5020-17159	5020-17163	5020-17167	5020-17171
	150	5020-17160	5020-17164	5020-17168	5020-17172
	250	5020-17161	5020-17165	5020-17169	5020-17173
	Length/ID (mm)	2.1	3.0	4.0	4.6
Particle size: 5 µm	50	5020-17130	5020-17134	5020-17138	5020-17142
	100	5020-17131	5020-17135	5020-17139	5020-17143
	150	5020-17132	5020-17136	5020-17140	5020-17144
	250	5020-17133	5020-17137	5020-17141	5020-17145

The maximum pressure is 20 MPa.

Cartridge Guard Column E (Pressure resistance 20 MPa)

Applicable Column's I.D.(mm)	Length (mm)	I.D. (mm)	Replacement Cartridge E (2 pcs)		Replacement Cartridge E Set (2 cartridges + 1 holder)	
			Particle size		Particle size	
			3 µm	5 µm	3 µm	5 µm
1.5, 2.1	10	1.5	5020-17198	5020-17150	5020-17199	5020-17151
2.1, 3.0		3.0	5020-17196	5020-17148	5020-17197	5020-17149
4.0, 4.6		4.0	5020-17194	5020-17146	5020-17195	5020-17147
2.1, 3.0	20	3.0	5020-17202	5020-17154	5020-17203	5020-17155
4.0, 4.6		4.0	5020-17200	5020-17152	5020-17201	5020-17153
Holder for Cartridge Guard Column E				For 10 mm length		5020-08500
				For 20 mm length		5020-08550

Guard column for UHPLC (high pressure 50 MPa)

Applicable Column's I.D.(mm)	length (mm)	ID (mm)	Replacement Cartridge E (2 pcs.)	Replacement Cartridge E Set (2 cartridges + 1 holder)
			Particle size 3 µm	Particle size 3 µm
1.0	10	1.5	5020-17206	5020-17209
1.5, 2.1		2.1	5020-17207	5020-17210
2.1, 3.0		3.0	5020-17208	5020-17211
Holder for Guard Column for UHPLC				5020-08630

Note: The fitting of the dedicated holder are as follows
Column side: Tubing of 1/16" OD, 0.18 mm ID, and 20 mm length is fixed.
Equipment : 1/16" thread with 2.4 mm tube length.

PEEK Column for UHPLC (High pressure 50 Mpa)

Particle size	Length (mm)	I.D. (mm)	
		2.1	4.6
3 µm	50	5020-17186	5020-17190
	100	5020-17187	5020-17191
	150	5020-17188	5020-17192
	250	5020-17189	5020-17193

Ako nás možno kontaktovať:

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