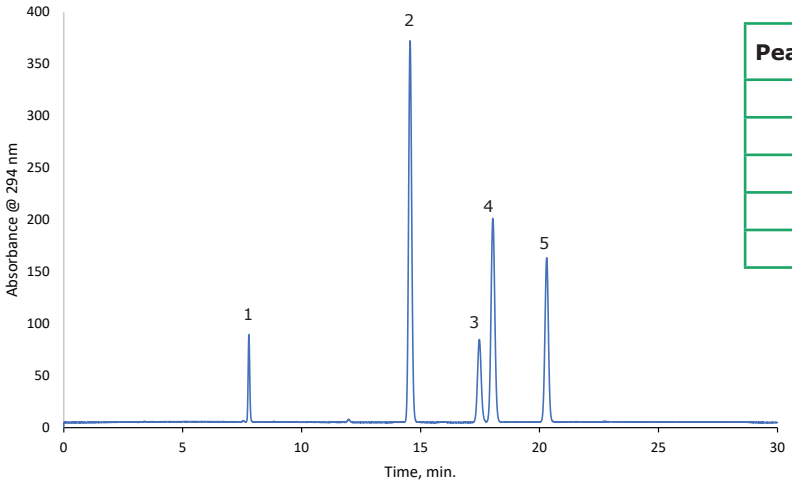
UHPLC Analysis of Vitamin A and Vitamin E on Ascentis Express C30



Peak Number	Compound	Concentration mg/mL
1	Retinyl Acetate	0.1
2	δ – tocopherol	2.0
3	γ – tocopherol	0.5
4	β – tocopherol	5.0
5	α – tocopherol	1.5

Conditions:

column: Ascentis Express C30, 25 cm x 4.6 mm I.D., 2.7 µm
mobile phase: [A] Water; [B] Methanol
gradient: Hold at 96% B for 13.0 min; 96% B to 100% B in 7.0 min; hold at 100% B for 4.0 min.
flow rate: 0.8 mL/min
column temp.: 20 °C
detector: UV 294 nm
injection: 10 µL
sample: vitamin samples, varied concentration, 6:3:1 methanol:ethanol:hexane

Description:

The 2.7 µm Ascentis Express C30 is an ideal choice for the separation of vitamin A and the isomers of vitamin E. The shape selectivity of C30 allows for the separation of gamma tocopherol and beta tocopherol, which typically coelute on a C18 column. These vitamins occur naturally in many food products and are used to make various dietary supplements, so it is useful to be able to separate these isomers for quality control and analysis.

Materials:

Product Part Number	Description
R4632	Retinyl Acetate
47784	δ – tocopherol
47785	γ – tocopherol
46401-U	β – tocopherol
47786	α – tocopherol
34860	Methanol
270733	Water
On Demand	Ascentis Express 160 Å C30, 2.7 µm, 25 cm x 4.6 mm

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