

Prevail™ Organic Acid HPLC Columns

Prevail™ Organic Acid Columns separate a wide range of organic acids with an unsurpassed combination of resolution, speed, sensitivity, and simplicity. Under the right set of conditions and an appropriate detector, Prevail™ Organic Acid Columns can be used to analyze not only short chain organic acids but also aromatic acids, long chain fatty acids, alcohols, and even carbohydrates. Use the retention time values in **Table 1** to aid in method development and mobile phase selection. Need high throughput or fast analysis? Run times can be dramatically decreased using the Rocket™ Column format or using a longer 250 x 4.6mm column to increase resolution.

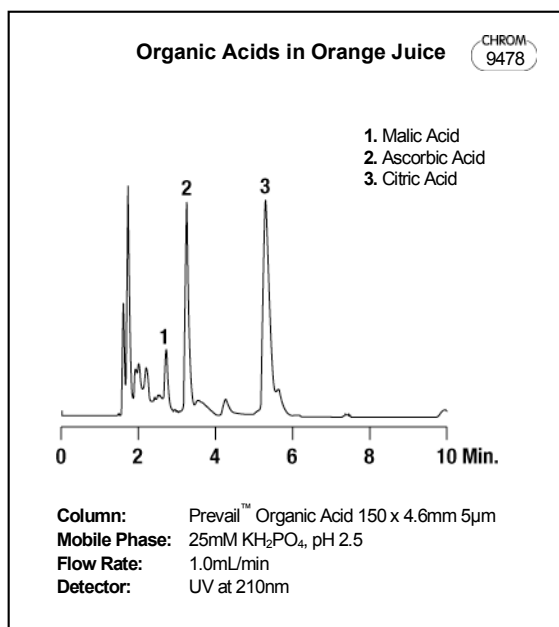
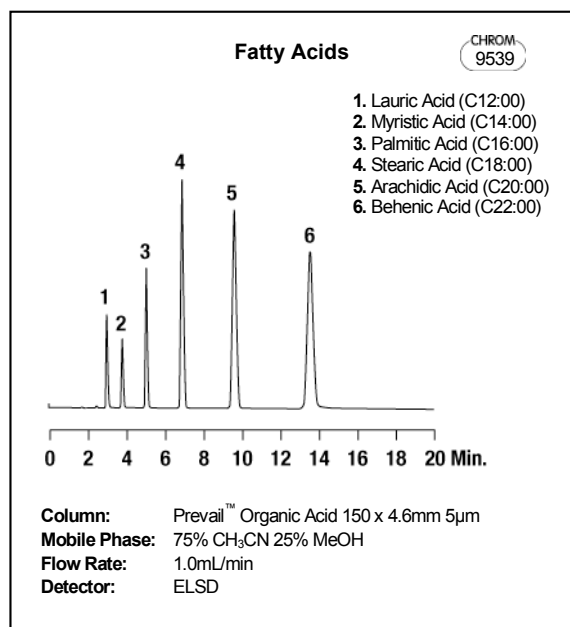
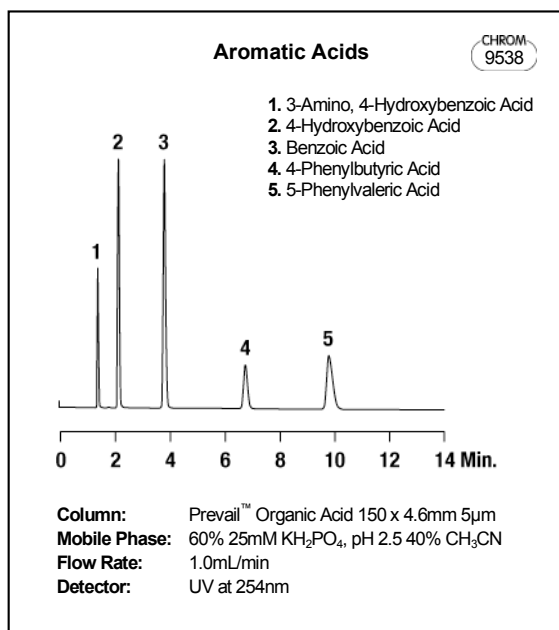
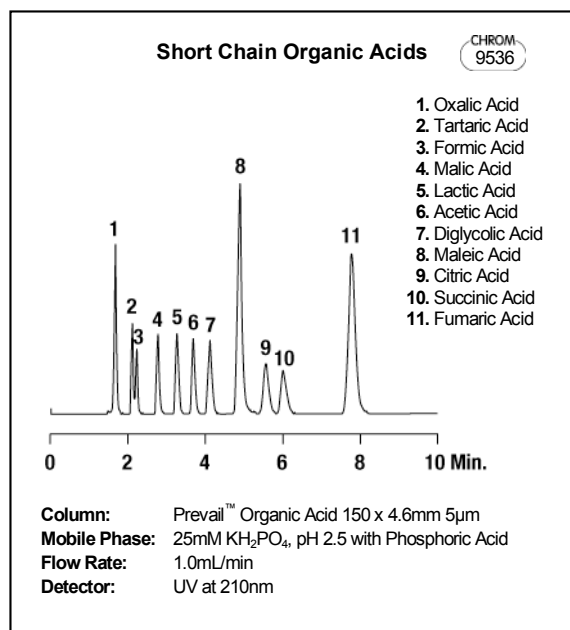


Table 1 - Retention Times (in min) of Common Analytes on Prevail Organic Acid 150 x 4.6mm, 5µm, 1.0mL/min, Using Various Mobile Phases

Analyte	25mM KH ₂ PO ₄ pH 2.5 with Phosphoric Acid	Water pH 2.5 with Formic Acid	60% 25mM KH ₂ PO ₄ pH 2.5, 40% Acetonitrile	75% Acetonitrile 25% Methanol
Oxalic Acid	1.64	1.59	EV	EV
Tartaric Acid	2.09	2.15	EV	EV
Formic Acid	2.20	ND	EV	EV
Malic Acid	2.76	2.81	EV	EV
Lactic Acid	3.25	ND	EV	EV
Acetic Acid	3.67	ND	EV	EV
Glycolic Acid	2.09	ND	EV	EV
Diglycolic Acid	4.11	3.99	NT	EV
Maleic Acid	4.87	ND	NT	EV
Citric Acid	5.56	5.54	NT	EV
Succinic Acid	6.01	6.14	NT	EV
Fumaric Acid	7.76	ND	NT	EV
Quinic Acid	NT	2.21	EV	EV
Pyruvic Acid	3.46	NT	NT	EV
Oxalacetic Acid	2.17	2.26	EV	EV
2-Ketoglutaric Acid	3.28	3.41	EV	EV
Glutamic Acid	NT	1.82	EV	EV
Ascorbic Acid	3.24	2.95	EV	EV
Propionic Acid	>10.00	>10.00	NT	NT
Butyric Acid	>10.00	>10.00	2.50	NT
Benzoic Acid	>10.00	>10.00	3.84	NT
3-Amino, 4-Hydroxybenzoic Acid	>10.00	>10.00	1.40	NT
Gallic Acid	>10.00	>10.00	1.48	NT
4-Hydroxybenzoic Acid	>10.00	>10.00	2.16	NT
4-Phenylbutyric Acid	>10.00	>10.00	6.77	NT
5-Phenylvaleric Acid	>10.00	>10.00	9.80	NT
4-Butoxybenzoic Acid	>10.00	>10.00	17.74	NT
Capric Acid	DNE	DNE	>20.00	2.52
Lauric Acid	DNE	DNE	>20.00	3.02
Myristic Acid	DNE	DNE	>20.00	3.83
Palmitic Acid	DNE	DNE	>20.00	5.08
Stearic Acid	DNE	DNE	>20.00	6.94
Arachidic Acid	DNE	DNE	>20.00	9.65
Behenic Acid	DNE	DNE	>20.00	13.55
Glucose	ND	1.76	EV	EV
Fructose	ND	1.82	EV	EV
Sucrose	ND	2.33	EV	EV
Maltose	ND	2.06	EV	EV
Lactose	ND	1.93	EV	EV
Stachyose	ND	2.89	EV	EV
Maltotriose	ND	2.58	EV	EV
Galactose	ND	1.73	EV	EV
Mannitol	ND	1.78	EV	EV
Glycerol	ND	1.96	EV	EV
Methanol	2.28	ND	EV	EV
Ethanol	3.65	ND	EV	EV
Isopropanol	7.10	ND	EV	EV
Ethylene Glycol	ND	ND	EV	EV

DNE = Does Not Elute EV = Elutes In Void NT = Not Tested ND = Not Capable of Being Determined With Detector Used

Prevail™ Analytical Columns

Packing	Particle		Industry Standard Part No.	Waters Part No.
	Size	Length x i.d.		
OA	5µm	150 x 4.6mm	88640	88740
	5µm	250 x 4.6mm	88645	88745
	3µm	100 x 4.6mm	88650	88750
	3µm	150 x 4.6mm	88655	88755

Prevail™ Rocket™ Columns

Packing	Part Size	Length x i.d.	Part No.
OA	3µm	53 x 7mm	50755
	3µm	33 x 7mm	99292

CAUTION Users should be aware of the hazards associated with their mobile phase. Always use appropriate personal protective equipment such as safety goggles or glasses, Lab coat and gloves when the column is in operation or when handling mobile phase.

WARNING Columns operate at high pressures. To avoid leaks or pressure related failures, please ensure all fittings and connections are tight and secure before operating the column. Refer to the QC chromatogram for maximum operating pressures.

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