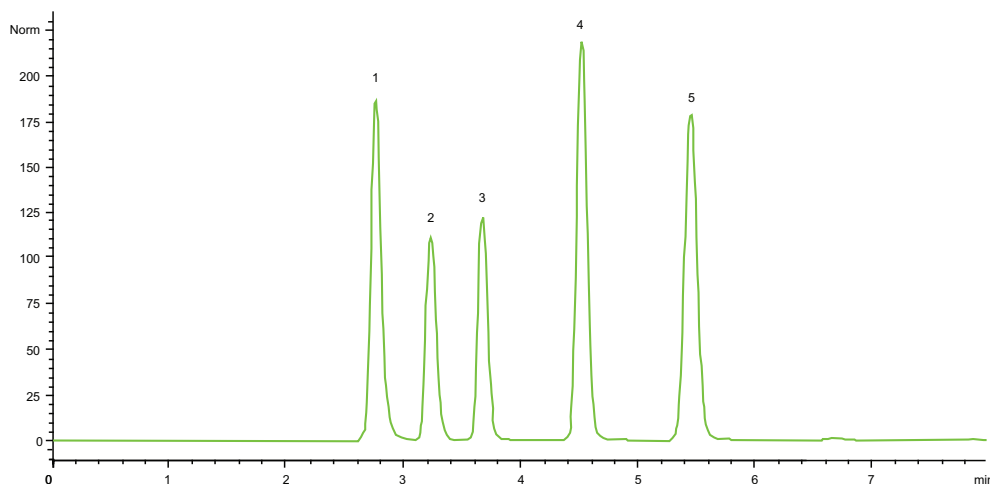


Organic Acids

On GraceSmart™ HPLC Column



1. Tartaric Acid
2. Malic Acid
3. Lactic Acid
4. Maleic Acid
5. Fumaric Acid

Test condition (as USP assay)

Test sample:

- (1) 5.5mg/ml Tartaric Acid
- (2) 11.8mg/ml Malic Acid
- (3) 15.2mg/ml Lactic Acid
- (4) 0.13mg/ml Maleic Acid
- (5) 0.18mg/ml Fumaric Acid

Column: GraceSmart™ C18, 120Å, 5µm, 4.6 x 150mm (Part #: 5138810)

Mobile Phase: 0.025M KH₂PO₄ (pH2.5) : Methanol = 97:3

Flow: 0.7ml/min

Detection: UV at 220nm

Injection Volume: 1µl

Sample	Retention Time (min)	Height
1. Tartaric Acid	2.766	185.9
2. Malic Acid	3.238	111.3
3. Lactic Acid	3.679	122.2
4. Maleic Acid	4.528	218.7
5. Fumaric Acid	5.459	178.5

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