



For Scientists, By Scientists!

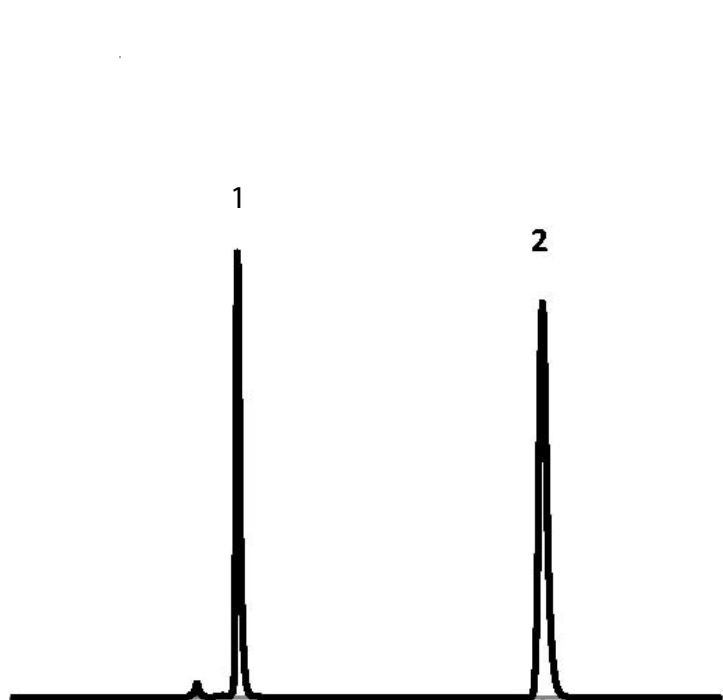


ORO CHEM TECHNOLOGIES INC.

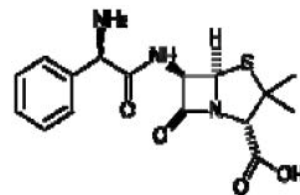
HPLC Application Notes

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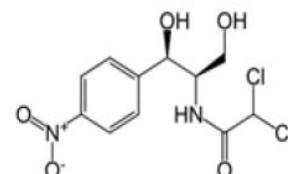
Antibiotics



1. Ampicillin

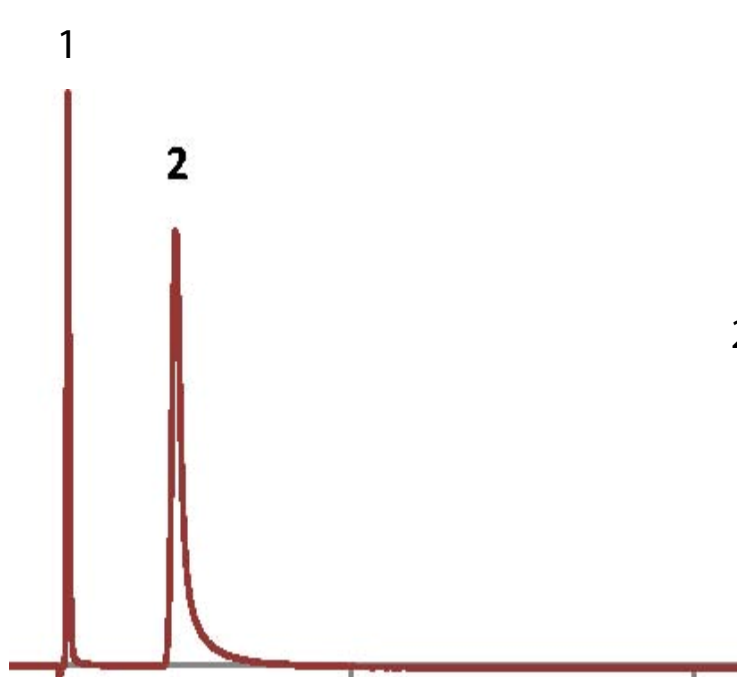


2. Chloramphenicol

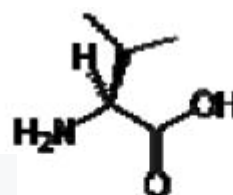


Column	Prestige C18 5µm, 250 x 4.6mm
Mobile Phase	CAN/MeOH/(NH ₄)HPO ₄ (20/10/70)
Flow Rate	0.6ml/min
Detection	UV at 210nm
Injection Volume	3µl

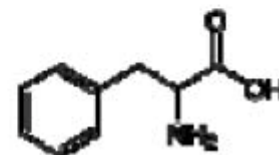
Amino Acids



1. L-Valine



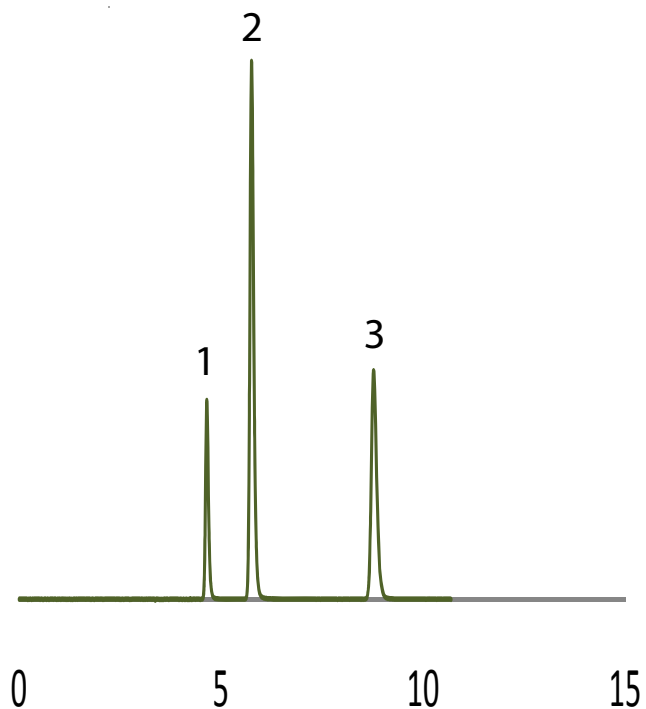
2. L-Phenylalanine



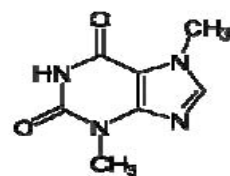
Column	Polar Embedded C18, 150 x 4.6mm
Mobile Phase	20mM K ₂ HPO ₄ / H ₃ PO ₄
Flow Rate	0.8ml/min
Detection	UV at 254nm
Injection Volume	5µl

Drugs and Metabolites

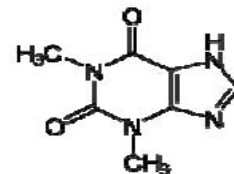
Caffeine Metabolites



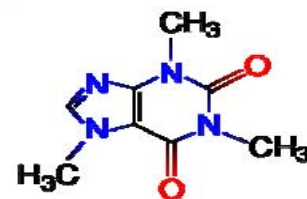
1.Theobromine



2.Theophylline

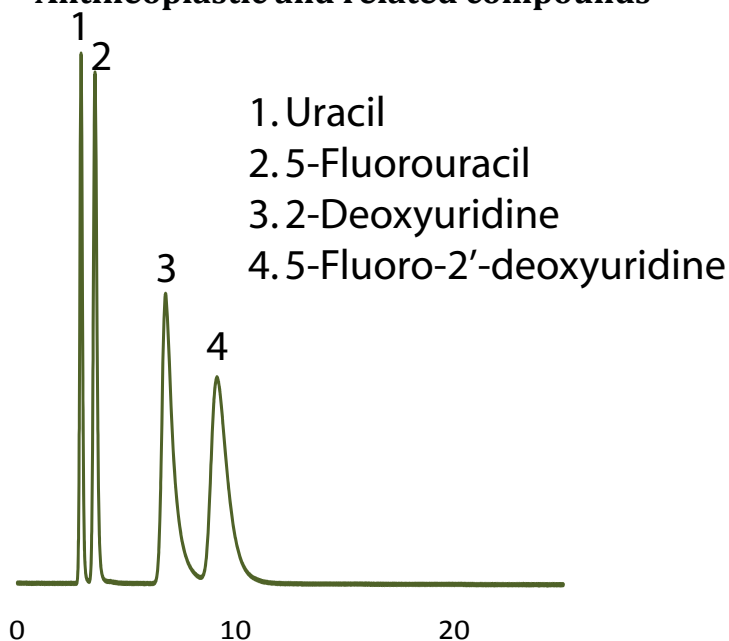


3. Caffeine



Column	Reliasil C18 5µm, 250 x 4.6mm
Mobile Phase	ACN / Water (15/85)
Flow Rate	0.8ml/min
Detection	UV at 254nm
Injection Volume	3µl

Antineoplastic and related compounds



1.Uracil

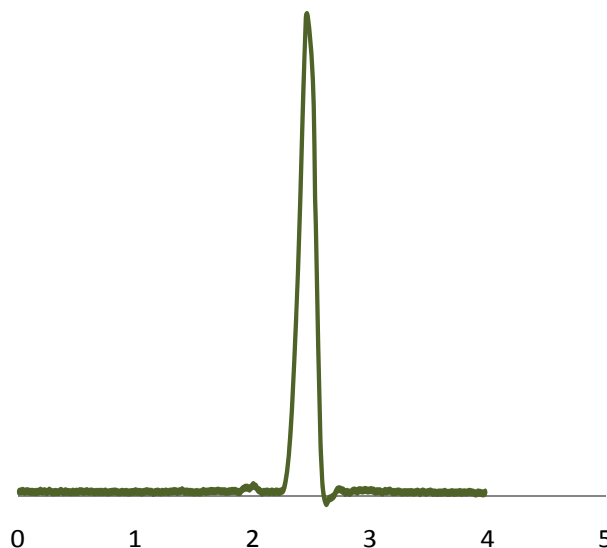
2.5-Fluorouracil

3.2-Deoxyuridine

4.5-Fluoro-2'-deoxyuridine

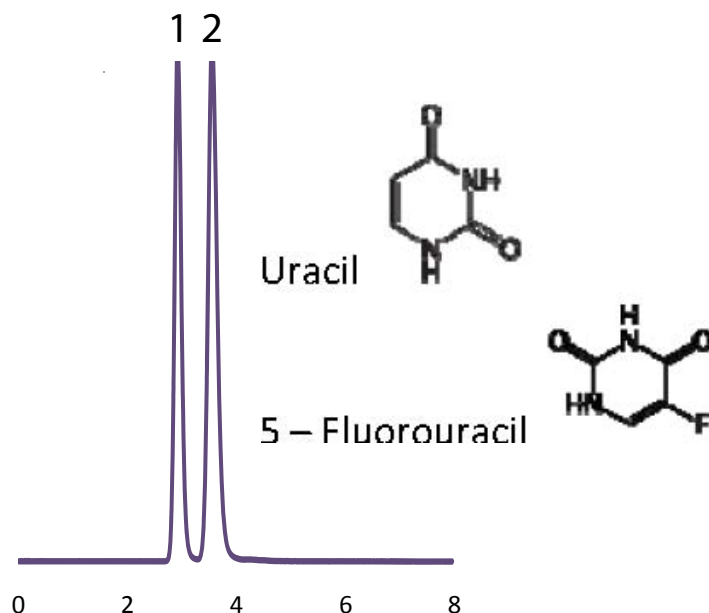
Column	Polar Embedded C18, 150 x 4.6mm
Mobile Phase	10mM NH ₄ H ₂ PO ₄
Flow Rate	0.8ml/min
Detection	UV at 254nm
Injection Volume	5µl

Aspirin

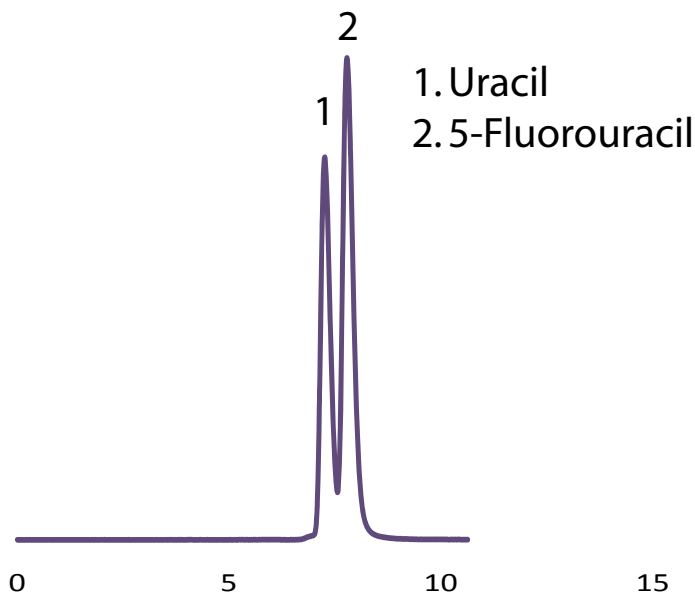


Column	Reliasil C8 5µm, 150 x 4.6mm
Mobile Phase	ACN / Water (60/40)
Flow Rate	0.8ml/min
Detection	UV at 254nm
Injection Volume	2µl

Nucleic Acids

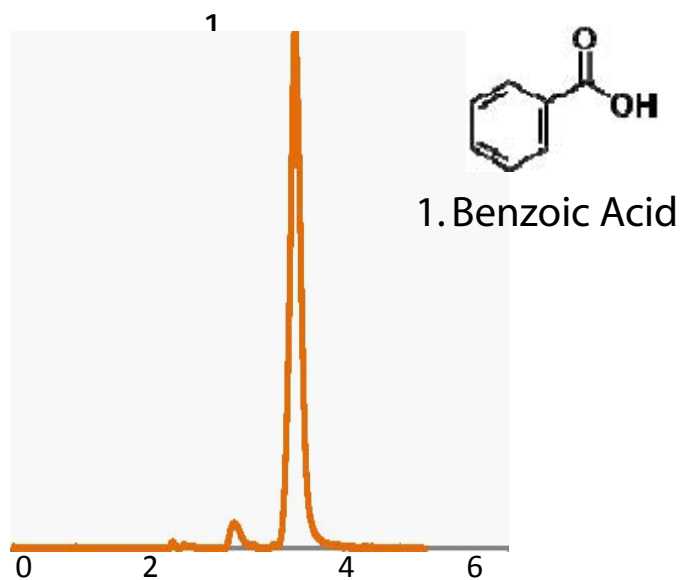


Column	Polar Embedded C18, 150 x 4.6mm
Mobile Phase	10mM NH ₄ H ₂ PO ₄
Flow Rate	0.8ml/min
Detection	UV at 254nm
Injection Volume	5µl



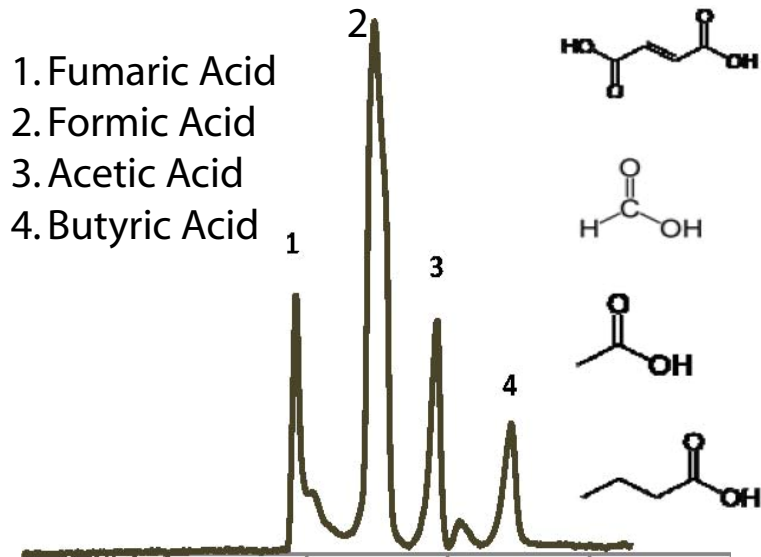
Column	Reliasil C18, 150 x 4.6mm
Mobile Phase	20% ACN / 10mM NH ₄ H ₂ PO ₄
Flow Rate	0.2ml/min
Detection	UV at 254nm
Injection Volume	2µl

Food Additives



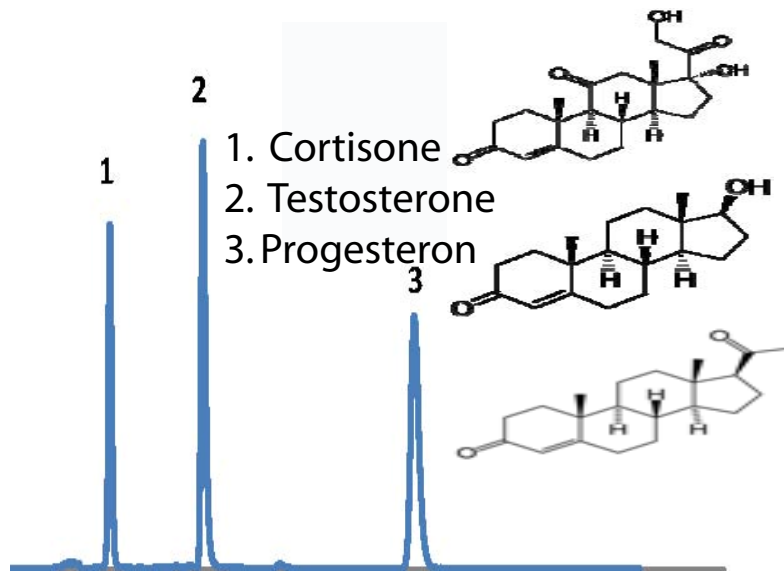
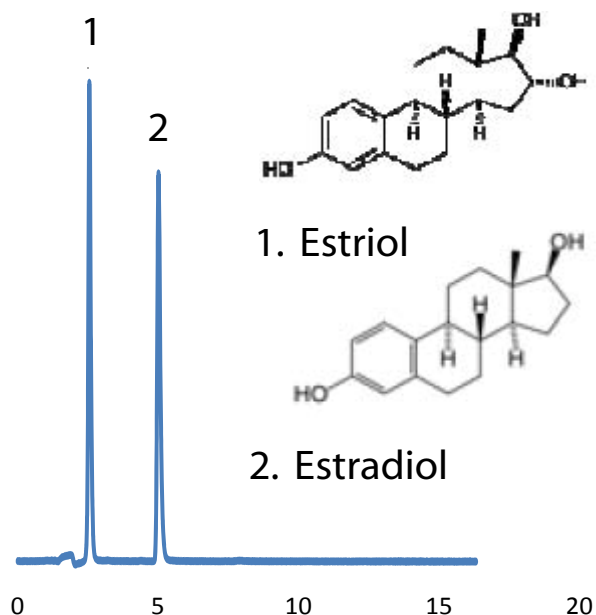
Column	Reliasil C8 5µm, 150 x 4.6mm
Mobile Phase	ACN / Water (60/40)
Flow Rate	0.8ml/min
Detection	UV at 200nm
Injection Volume	2µl

Organic Acids



Column	Reliasil C8 5µm, 150 x 4.6mm
Mobile Phase	ACN / Water (60/40)
Flow Rate	0.8ml/min
Detection	UV at 200nm
Injection Volume	2µl

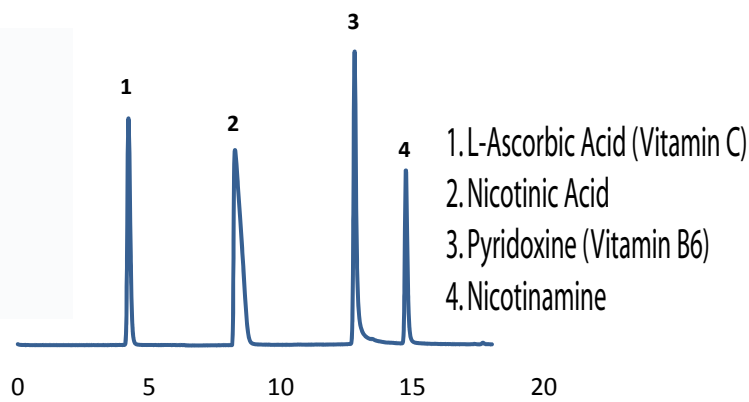
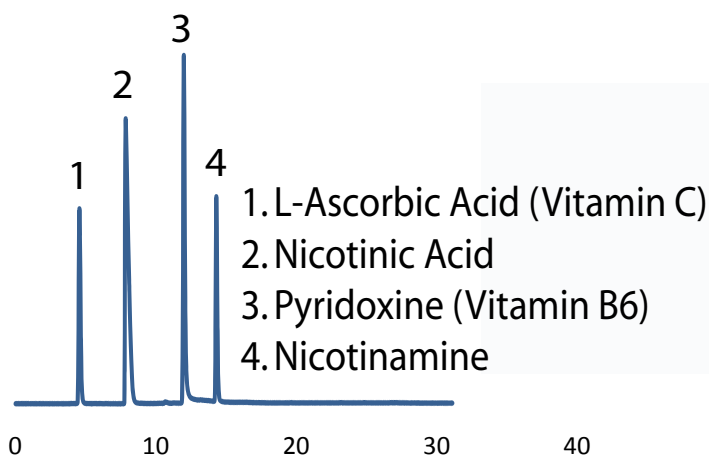
Steroids



Column	Reliasil C8 5µm, 150 x 4.6mm
Mobile Phase	ACN / Water (50/50)
Flow Rate	0.8ml/min
Detection	UV at 230nm
Injection Volume	2µl

Column	Reliasil C8 5µm, 150 x 4.6mm
Mobile Phase	ACN / Water (50/50)
Flow Rate	0.8ml/min
Detection	UV at 230nm
Injection Volume	4µl

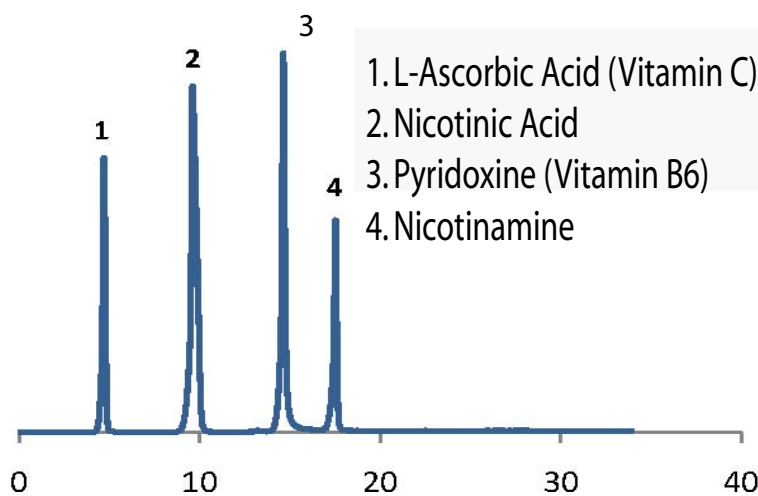
Water Soluble Vitamins



Column	Emerald C18 5µm, 250 x 4.6mm A: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6) B: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6)/ACN (80:20) 0%B (0-5min); 0-100%B (5-20min, linear)
Mobile Phase	100% B (20-25min)
Flow Rate	0.6ml/min
Detection	UV at 254nm
Injection Volume	6µl

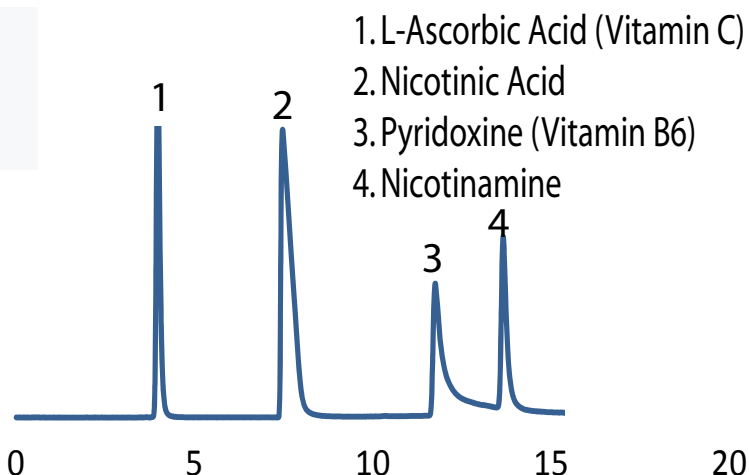
Column	Reliasil C18 5µm, 250 x 4.6mm A: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6) B: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6)/ACN (80:20) 0%B (0-5min); 0-100%B (5-20min, linear)
Mobile Phase	100% B (20-25min)
Flow Rate	0.6ml/min
Detection	UV at 254nm
Injection Volume	6µl

Water Soluble Vitamins



1. L-Ascorbic Acid (Vitamin C)
2. Nicotinic Acid
3. Pyridoxine (Vitamin B6)
4. Nicotinamine

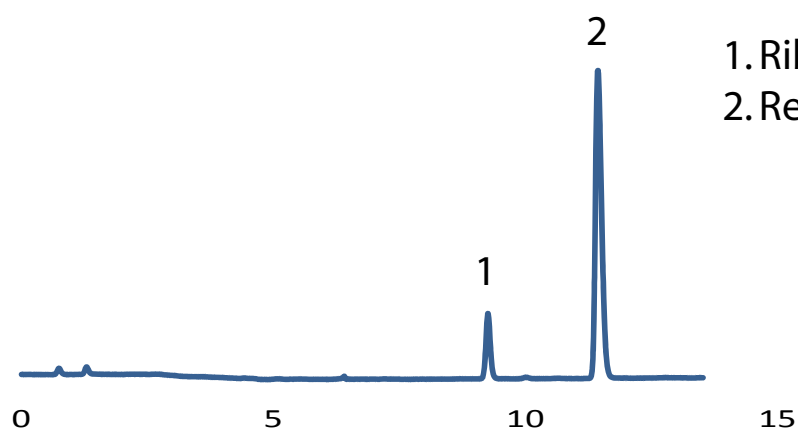
Column	Competitor 1: C18 5 μ m, 250 x 4.6mm A: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6) B: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6)/ACN (80:20) 0%B (0-5min); 0-100%B (5-20min, linear)
Mobile Phase	100% B (20-25min)
Flow Rate	0.6ml/min
Detection	UV at 254nm
Injection Volume	6 μ l



1. L-Ascorbic Acid (Vitamin C)
2. Nicotinic Acid
3. Pyridoxine (Vitamin B6)
4. Nicotinamine

Column	Competitor 2: C18 5 μ m, 250 x 4.6mm A: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6) B: 20mM KH ₂ PO ₄ -K ₂ HPO ₄ (pH 6.6)/ACN (80:20) 0%B (0-5min); 0-100%B (5-20min, linear)
Mobile Phase	100% B (20-25min)
Flow Rate	0.6ml/min
Detection	UV at 254nm
Injection Volume	6 μ l

Water Soluble Vitamins

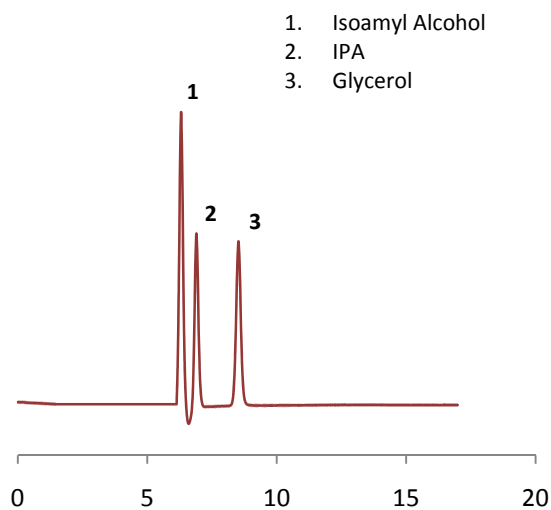


1. Riboflavin
2. Rescorcinol

ACN/Water (5/58/0.1)	Orosil ODS 5 μ m, 250 x 4.6mm A: ACN/Water/TFA (5/58/.01) B: ACN/Water/TFA (60/40/.01)
Mobile Phase	30-90% B (0-20min, linear), 90% (20-25min)
Flow Rate	0.8ml/min
Detection	UV at 254nm
Injection Volume	20 μ l

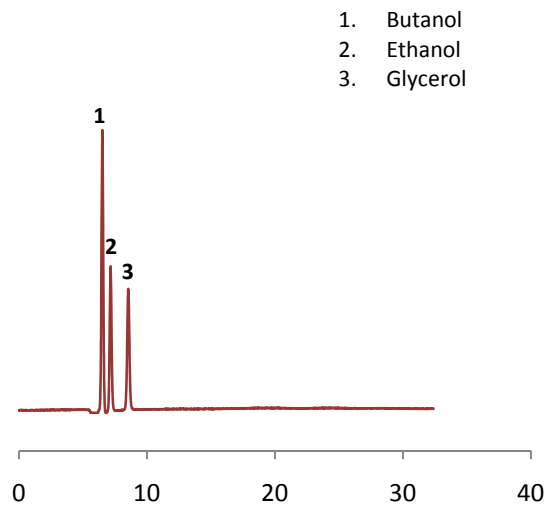
Others

Isoamyl Alcohol, IPA, and Glycerol



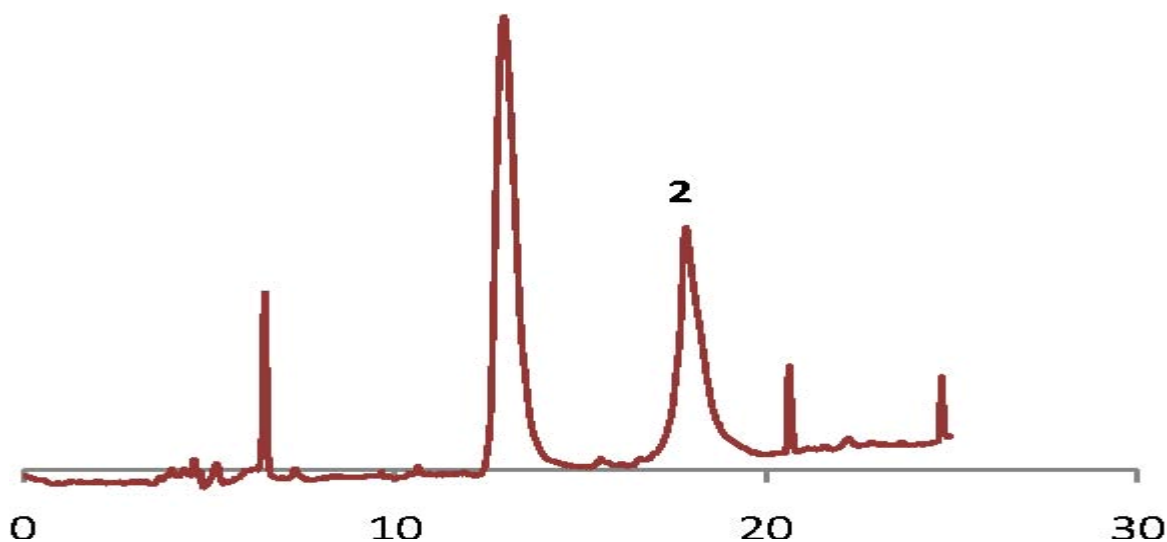
Column	Reliasil Amine 5 μ m, 250 x 4.6mm
Mobile Phase	ACN/Water (60/40)
Detection	RI
Injection Volume	1 μ l

Butanol, Ethanol, and Glycerol



Column	Reliasil Amine 5 μ m, 250 x 4.6mm
Mobile Phase	ACN/Water (60/40)
Detection	RI
Injection Volume	1 μ l

Ranse, and Lysozyme



Column	Orosil ODS 5 μ m, 250 x 4.6mm A: ACN/Water/TFA (5/85/.01) B: ACN/Water/TFA (60/40/.01)
Mobile Phase	30-90%B (0-20min, linear), 90% (20-25min)
Flow rate	0.8ml/min
Detection	UV at 254nm
Injection Volume	1 μ l

UHPLC

