

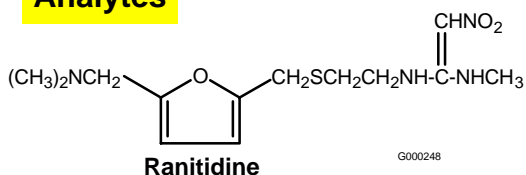


DISCOVERY

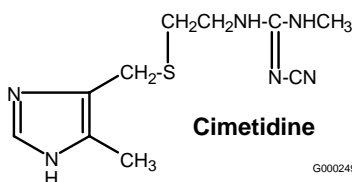
Solid Phase Extraction Products

Anti-Ulcer Compounds in Serum

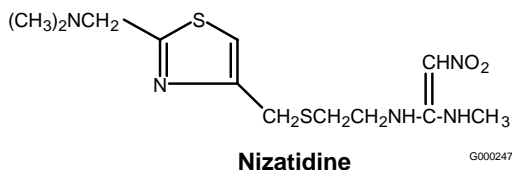
Analytes



G000248



G000249

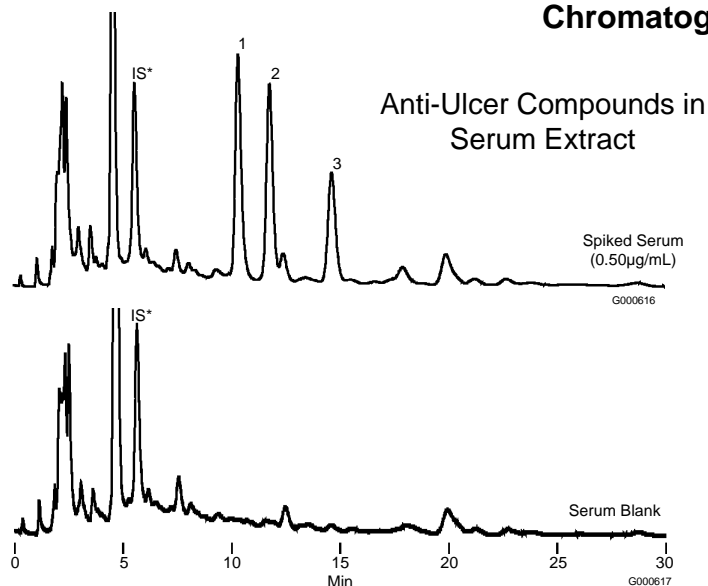


G000247

SPE Procedure

- SPE Tube:** Discovery™ DSC-18, 500mg/3mL (Cat. No. 52603-U)
Condition: 2mL methanol, then 2mL 25mM K₂HPO₄ (pH 9.0)
Apply Sample: 1mL porcine serum spiked with 0.25µg/mL or 0.50µg/mL each analyte, basified with 2.5µL 10M KOH
Wash and Dry: 2mL 5% methanol in 25mM K₂HPO₄ (pH 9.0); dry tube 10 min with nitrogen stream
Elute: 1mL methanol; evaporate to dryness with nitrogen stream at room temperature; reconstitute in 200µL mobile phase containing 1.25µg/mL or 2.50µg/mL famotidine (IS)

Chromatography



HPLC Analysis Conditions

- Column:** Discovery C18, 15cm x 4.6mm, 5µm particles, preceded by a 2cm C18 guard column and 0.5µm frit filter.
Mobile Phase: methanol:25mM K₂HPO₄, pH 7.0 (20:80)
Flow Rate: 1mL/min
Temp.: ambient
Det.: UV, 235nm
Inj.: 60µL reconstituted porcine serum extract

Efficiency of Recovery

Compound	Concentration (µg/mL)	%Recovery	%RSD (n=6)
1. Ranitidine	0.25	92.5	±5.4
	0.50	95.5	±5.1
2. Cimetidine	0.25	94.5	±5.2
	0.50	98.2	±3.2
3. Nizatidine	0.25	97.0	±7.0
	0.50	94.8	±3.4

*IS = Famotidine (internal standard)

DSC-18 Solid Phase Extraction Products

Ordering Information

Discovery DSC-18 Tube	Quantity/Package	Cat. No.
50mg/1mL	108	52601-U
100mg/1mL	108	52602-U
500mg/3mL	54	52603-U
500mg/6mL	30	52604-U
1g/6mL	30	52606-U
2g/12mL	20	52607-U
5g/20mL	20	52608-U
10g/60mL	16	52609-U
bulk packing	100 grams	52600-U

Ask about

- custom-packed Discovery SPE tubes
- tubes packaged in bulk quantities

For technical information on SPE, request our *Guide to Solid Phase Extraction* (Bulletin 910).

Contact our Technical Service Department
 (Phone 800-359-3041 or 814-359-3041,
 FAX 800-359-3044 or 814-359-5468)

for expert answers to your questions and to receive technical literature.

Email questions and comments to discoveryspe@supelco.sial.com

SPE Products for:

- Extracting pharmaceuticals and metabolites
- Processing biological samples
- Providing reproducible SPE recoveries

To order, call 800-247-6628 / 814-359-3441, fax 800-447-3044 / 814-359-3044.

For more information on Discovery Solid Phase Extraction Products, visit our website at www.sigma-aldrich.com

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