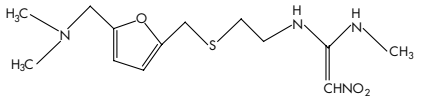
RANITIDINE IN RAT PLASMA (H_2 BLOCKER)

HPLC METHOD

COLUMN:	XTerra® MS C_{18} 2.1 x 30 mm, 3.5 µm
PART NUMBER:	186000398
MOBILE PHASE A:	100 mM NH_4COOH
MOBILE PHASE B:	ACN
ISOCRATIC MOBILE PHASE COMPOSITION:	30% A; 70% B
FLOW RATE:	0.2 mL/min
INJECTION VOLUME:	15 µL
DETECTION:	MS ESI+
INSTRUMENT:	Alliance® 2790, Micromass® Quattro Ultima™
ION SOURCE:	ESI+
SOURCE TEMPERATURE:	150 °C
GAS CELL:	1.5e-3 mbar, 20 eV
DESOLVATION TEMPERATURE:	350 °C
CONE GAS FLOW:	150 L/hr
DRYING GAS FLOW:	600 L/hr
CONE VOLTAGE:	20 V



RANITIDINE

OASIS® MCX EXTRACTION METHOD

Oasis® MCX Extraction Plate,10 mg/96-well
Part Number 186000259

CENTRIFUGE:
25 mL of EDTA rat plasma
at 10 000 (RPM)

SPIKE:
5 mL of centrifuged plasma with drug
(max 5% organic load)
Add 100 µL NH_4OH

CONDITION PLATE:
500 µL methanol followed
with 500 µL water

LOAD PLATE:
500 µL spiked rat plasma

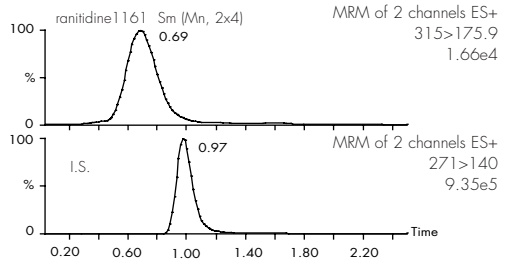
WASH PLATE:
500 µL 2% HCl in water

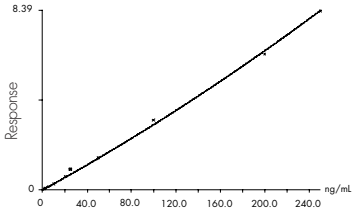
ELUTE PLATE:
300 µL 5% NH_4OH in methanol

DILUTE:
200 µL water

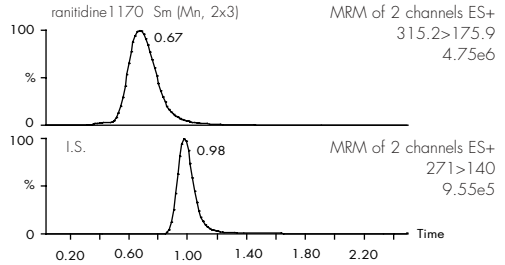
Compound name: Ranitidine
Coefficient of Determination: 0.999099
Calibration curve: 2.002205e-5* x^2 + 0.0284745* x + 0.00311700
Response type: Internal Std (Ref 1), Area* (IS Conc./IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x^2, Axis trans: None

Plasma spike 1.0 ng/mL, 70/30 ACN/H_2O 0.1 M NH_4 Formate





Plasma spike 250 ng/mL, 70/30 ACN/H_2O 0.1 M NH_4 Formate



RANITIDINE (MCX) (ng/mL)	mean	standard deviation	coefficient of variation (%)	recovery (%)
1	0.99 (5)	0.02	2	99
2.5	2.54	0.11	4.3	100
5	4.9	0.3	6.1	98
10	10.26	0.68	6.6	102
20	19.46	0.97	4.9	97
50	49.78	2.51	5	99
100	101.55	5.31	5.2	101
200	201.97	4.67	2.3	101
250	247.09	1.4	0.5	99

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