# Waters™

# Applikationsbericht

# Clemastine In Rat Plasma - Oasis On-Line 1 Column Approach

Waters	Corpo	oration
vvalcis	COID	Jialion

This is an Application Brief and does not contain a detailed Experimental section.

## Abstract

This application brief highlights the analysis of clemastine In rat plasma using Oasis on-line 1 column approach method.

# Introduction

Clemastine is studied in this application brief.

# H<sub>3</sub>CO OCH<sub>3</sub> OCH<sub>3</sub> OCH<sub>3</sub>

# CLEMASTINE PAPAVERINE I.S.

# Experimental

# Wash Conditions

LC<sub>1</sub>: Alliance 2790 - 0.4 mL/min

LC<sub>2</sub>: Waters 515–4.0 mL/min

Loading mobile phase: 100% water

Eluting mobile phase: 1 minute gradient 5% ACN to 95% ACN

Eluting mobile phase additive: 0.5% Formic acid

Extraction column temp.: 40 °C

Switching valve: Rheodyne LabPro 10 ports, 2 position

MS: Quattro Ultima Triple Quadrupole

Ion source: ESI+

Source temp.: 150 °C

Gas cell: 1.5e<sup>-3</sup> mbar

Desolvation gas: 600 L/hr

Cone voltage: 20 V

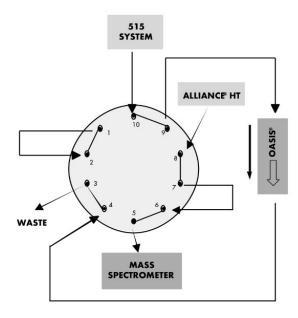
Collision energy: 20

Time	HPLC gradient flow 0.4 mL/min		Valve position
	Α	В	
0.0	5	95	
0.5			switch position 2 to 1
1.0	95	5	
2.60	95	5	
2.90			switch position 1 to 2
3.0	5	95	

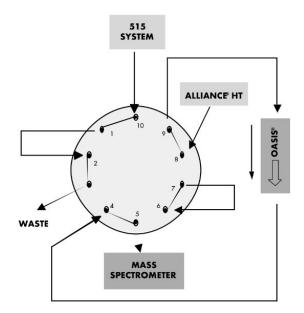
A - Acetonitrile + 0.5% formic acid

B - Water + 0.5% formic acid

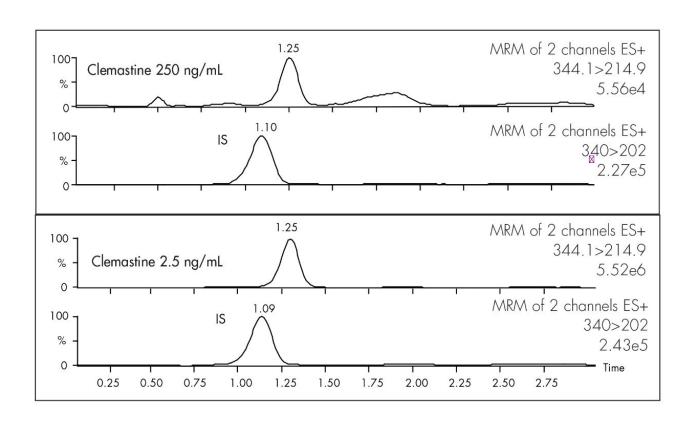
## LOAD POSITION



## **ELUTION POSITION**

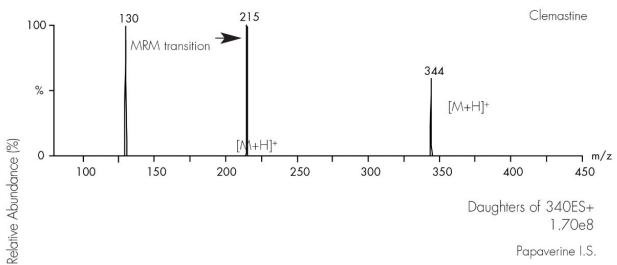


# Results and Discussion



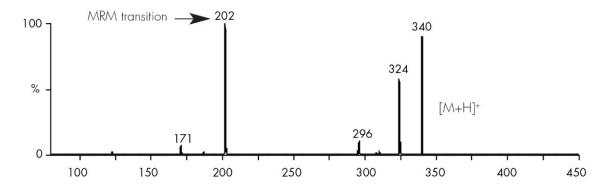


Daughters of 344ES+ 3.22e8



Daughters of 340ES+ 1.70e8

Papaverine I.S.

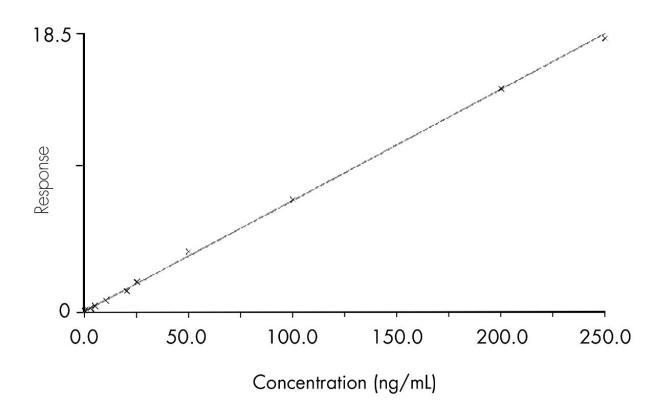


Coefficient of Determination: 0.999397

Calibration curve:  $1.59441e-6 * x^2 + 0.0733900 * x + 0.00620068$ 

Response type: Internal Std (Ref 1), Area\* (IS Conc./IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting:  $1/x^2$ , Axis trans: None



Conc. ng/mL n=6	Average	Standard variation	RSD (%)
1.0	0.98	0.02	2.1
2.5	2.56	0.11	4.4
5.0	5.25	0.12	2.3
10.0	9.50	0.25	2.7
100.0	101.43	2.69	2.6
200.0	201.14	3.20	1.6
250.0	247.10	1.58	0.6

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