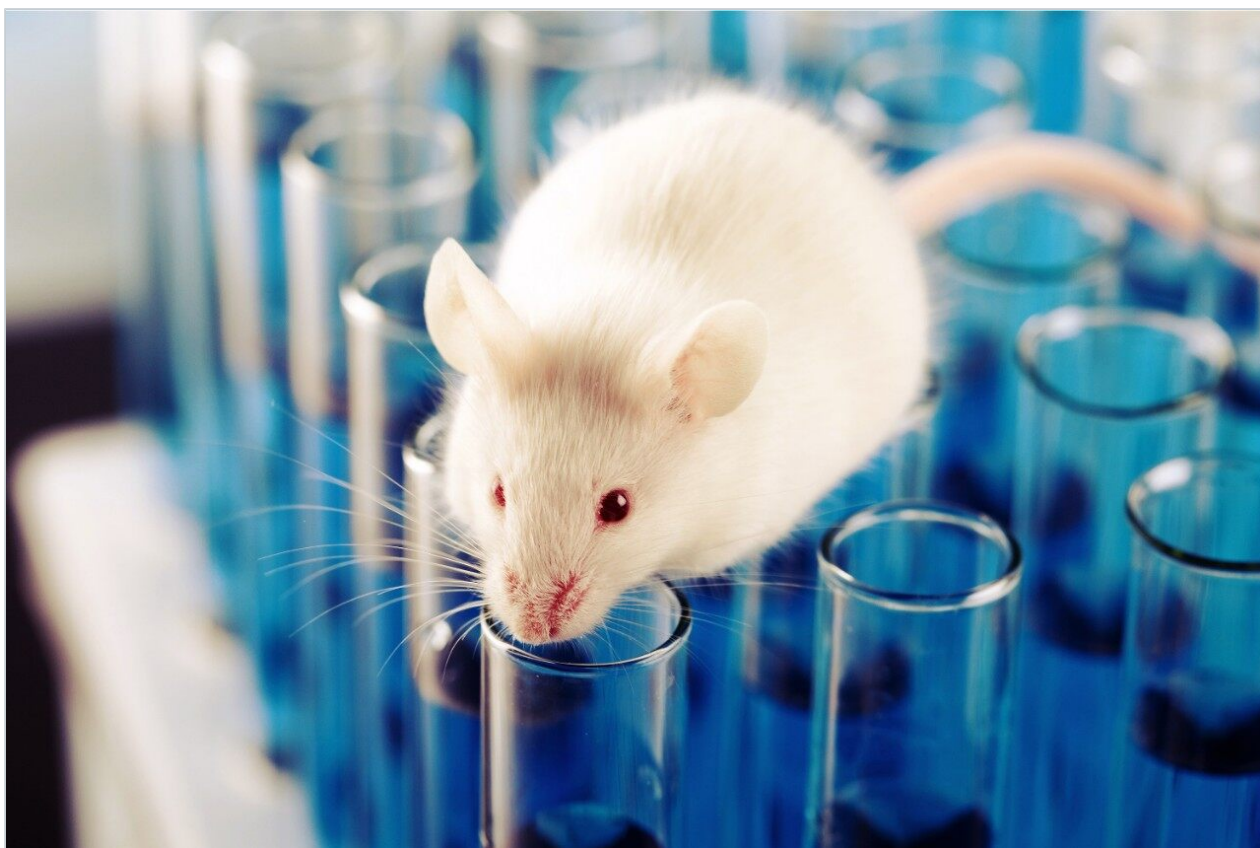


Note d'application

Niflumic Acid/Camphorsulfonic Acid Extracted from Rat Plasma

Waters Corporation



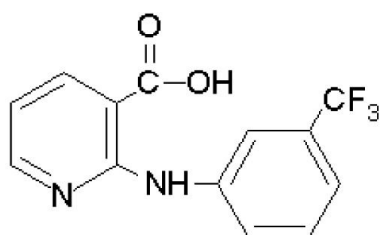
This is an Application Brief and does not contain a detailed Experimental section.

Abstract

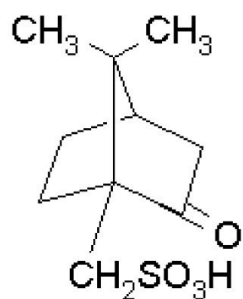
This application brief demonstrates analysis of niflumic acid/camphor sulfonic acid extracted from rat plasma.

Introduction

The compounds used in this study are - Niflumic Acid and (1S)-Camphor-10-sulfonic acid.



Niflumic Acid - 115% recovery
MW 282.2, C₁₃H₉F₃N₂O₂



(1S)-Camphor-10-sulfonic acid -
109% recovery
MW 232.3, C₁₀H₁₆O₄S

Experimental

Oasis WAX SPE Protocol

Plate:	Oasis WAX μ Elution Plate
Condition:	200 μ L MeOH
Equilibrate:	200 μ L H ₂ O
Load:	100 μ L 1:1 diluted rat plasma, 10 pg/ μ L, w/2% H ₃ PO ₄
Wash 1:	200 μ L 25 mM NH ₄ CH ₂ COOH buffer in H ₂ O, pH 5
Wash 2:	200 μ L MeOH
Elute:	50 μ L (25 μ L x 2) MeOH w/2% NH ₄ OH
Dilute:	50 μ L H ₂ O with 2% HCOOH
Inject:	10 μ L

Conditions

Column:	SunFire C ₁₈ 2.1 x 20 mm <i>IS</i> , 3.5 μ m
Part number:	186002531
Mobile phase A:	H ₂ O with 10 mM NH ₄ CH ₃ COOH, pH 5.5
Mobile phase B:	MeOH with 10 mM NH ₄ CH ₃ COOH, pH 5.5
Flow rate:	0.4 mL/min
Injection volume:	10 μ L

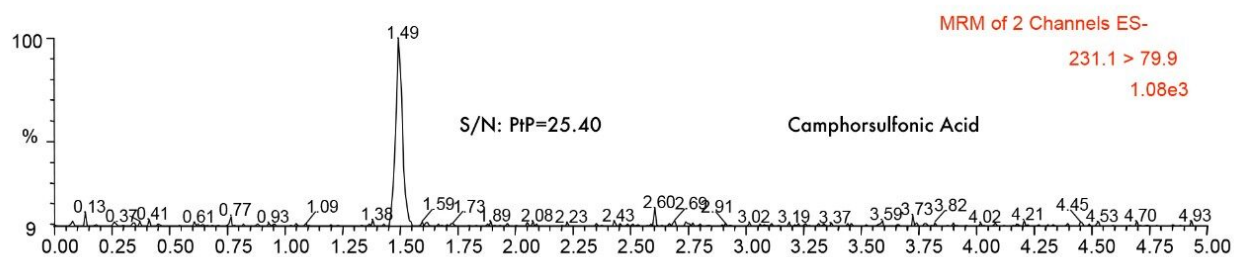
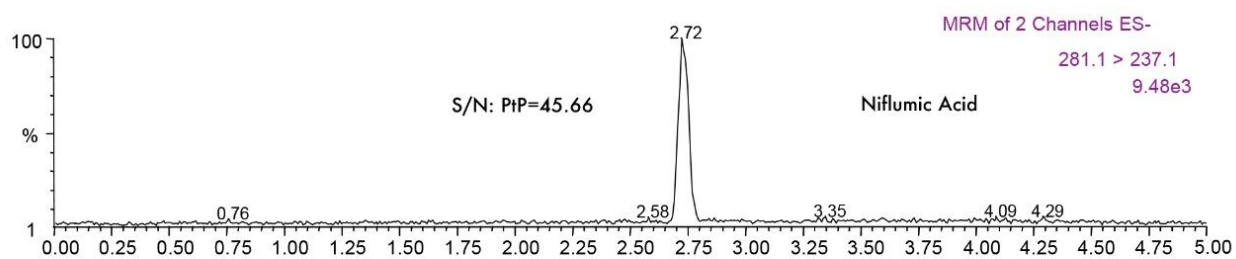
Sample concentration:	10 pg/μL each analyte
Temperature:	Ambient
Instrument:	Waters Alliance 2695 Waters Micromass Quattro micro API
ESI source temp.:	150 °C
Desolvation temp.:	350 °C
Cone gas flow:	50 L/Hr
Desolvation gas flow:	600 L/Hr
Collision Cell:	1.23e ⁻³ bar (Ar gas)
Compounds	MRM Transition
Niflumic Acid	<i>m/z</i> 281.1 → 237.1
Camphorsulfonic Acid	<i>m/z</i> 231.1 → 79.9

Gradient

Time (min)	Profile	
	%A	%B
0.0	95	5
3.0	5	95
4.0	5	95
4.1	95	5
5.0	95	5

Results and Discussion

	MRM transition	Cone (V)	CID (eV)
Niflumic acid	m/z 281.1 $\rightarrow$ 237.1	30	17
Camphorsulfonic acid	m/z 231.1 $\rightarrow$ 79.9	45	30



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WA41895, May 2005