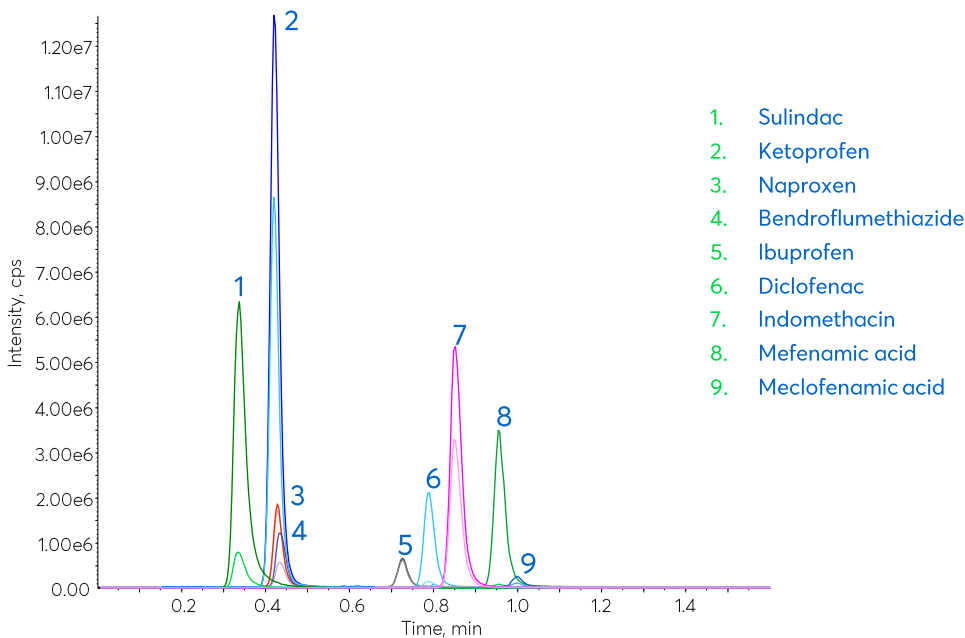


# Application note #7560

## Fast LC-MS/MS analysis of NSAIDs using an Avantor<sup>®</sup> ACE<sup>®</sup> HTP-MS column



# Method Details

## CONDITIONS

Column: Avantor® ACE® HTP-MS  
 Particle Size: 2 µm  
 Dimensions: 10 x 2.1 mm  
 Mobile Phases: A: 0.1% formic acid in H<sub>2</sub>O  
 B: 0.1% formic acid in MeCN

Time (mins)	% B
0	30
1	50
1.1	100
1.5	100
1.6	30
2.6	30

Flow Rate: 1.0 mL/min

Temperature: 22 °C

Detection: Sciex QTRAP® 6500+ LC-MS/MS system.

Ionisation mode: ESI, positive and negative mode; Source temperature: 550 °C;  
 Curtain gas: 40 psig; Ionspray™ source voltage: 4500 V; Ion source gas 1: 70 psig;  
 Ion source gas 2: 70 psig;

Sample: Standards at concentration of 500 ng/mL, 10 µg/mL for ibuprofen and naproxen

## MRM TRANSITIONS

Analyte	MRM	Optimised MS Parameters		
		Declustering potential (V)	Collision energy (V)	Cell exit potential (V)
Sulindac	+357.0 amu → +233.0 amu	1	65	26
	+357.0 amu → +247.6 amu	1	39	14
Ketoprofen	+225.0 amu → +209.1 amu	51	19	14
	+225.0 amu → +105.0 amu	51	29	12
Bendroflumethiazide	-419.9 amu → -289.0 amu	-155	-30	-15
	-419.9 amu → +87.1 amu	-155	-36	-15
Naproxen	-229.0 amu → -185.0 amu	-80	-10	-9
	-229.0 amu → -170.0 amu	-80	-20	-19
Ibuprofen	-205.0 amu → -161.0 amu	-30	-10	-11
	-205.0 amu → -159.2 amu	-30	-10	-11
Diclofenac	-293.9 amu → -250.0 amu	-25	-16	-21
	-293.9 amu → -214.0 amu	-25	-28	-25
Indomethacin	+357.9 amu → +139.0 amu	6	21	6
	+357.9 amu → +110.9 amu	6	65	12
Mefenamic acid	-239.9 amu → -195.9 amu	-50	-22	-19
	-239.9 amu → -179.4 amu	-50	-36	-13
Meclofenamic acid	-293.9 amu → -257.9 amu	-20	-18	-29
	-2293.9 amu → -213.9 amu	-20	-26	-25

## ORDERING TABLE

Product	Details	Size	Part Number
Avantor® ACE® HTP-MS Starter Kit	Fast Analysis LC-MS column (Holder + Cart)	10 x 2.1 mm	ACE-HTP-SK1
Acetonitrile	VWR HiPerSolv CHROMANORM® for LC-MS	2.5 L	83640.320
Water	VWR HiPerSolv CHROMANORM® for LC-MS	2.5 L	83645.320
Formic acid	VWR HiPerSolv CHROMANORM® for LC-MS	10 x 1 mL	85048.001