

LC-MS/MS による動物医薬品等の一斉分析(2)

Analysis of Drugs for domestic animals by LC-MS/MS (2)

ポジティブリスト関連標準試薬の LC-MS/MS 分離例

動物用医薬品混合液 PL-2-1 (和光純薬製) 24 成分

- HPLC による動物用医薬品等の一斉試験法、(畜水産物) 該当成分 -

Table 1 分析条件

Column : TSKgel ODS-100V 3 μ m (2.0mmI.D. x 150mmL)
 Mobile phase A : 0.1% Formic acid in water
 Mobile phase B : 0.1% Formic acid in acetonitrile
 Gradient : 0min(B 0%) 35min(B 100%) 40min(B 100%)
 Flow rate : 0.2mL/min
 Column temp.: 40
 Concentration : 0.5mg/L
 Injection volume : 2 μ L
 Instrument : QTrap (MDS SCIEX)

Table 2 モニタリング選択イオン一覧

No.	Drugs	Ionization	Monitoring ion(m/z)
1	5-Plopylsulfonyl-1H-benzimidazole-2-amine	ESI(+)	240.1 / 133.2
2	Levamisole	ESI(+)	207.1 / 91.2
3	Thiabendazole	ESI(+)	202.1 / 175.1
4	Trimethoprim	ESI(+)	291.1 / 230.3
5	Sulfadiazine	ESI(+)	251.1 / 92.2
6	Ormetoprim	ESI(+)	275.2 / 123.1
7	Sulfathiazole	ESI(+)	256.0 / 156.0
8	Sulfapyridine	ESI(+)	250.0 / 156.2
9	Sulfamerazine	ESI(+)	265.1 / 92.2
10	Thiamphenicol	ESI(+)	355.9 / 308.0
11	Sulfadimidine	ESI(+)	279.1 / 92.1
12	Sulfamethoxyipyridiazine	ESI(+)	281.1 / 156.1
13	Sulfamonomethoxine	ESI(+)	281.1 / 156.1
14	Sulfachlorpyridazine	ESI(+)	286.1 / 157.1
15	Sulfamethoxazole	ESI(+)	254.6 / 156.0
16	Sulfadoxine	ESI(+)	311.1 / 156.1
17	Ethopabate	ESI(+)	238.2 / 136.0
18	Sulfaguinoxaline	ESI(+)	301.0 / 156.2
19	Sulfadimethoxine	ESI(+)	311.1 / 156.2
20	Sulfanitran	ESI(+)	336.1 / 134.1
21	-Trenbolone	ESI(+)	271.2 / 165.3
22	-Trenbolone	ESI(+)	271.2 / 165.2
23	Melengestrol Acetate	ESI(+)	397.2 / 279.4
24	Zeranol	ESI(-)	321.1 / 277.2

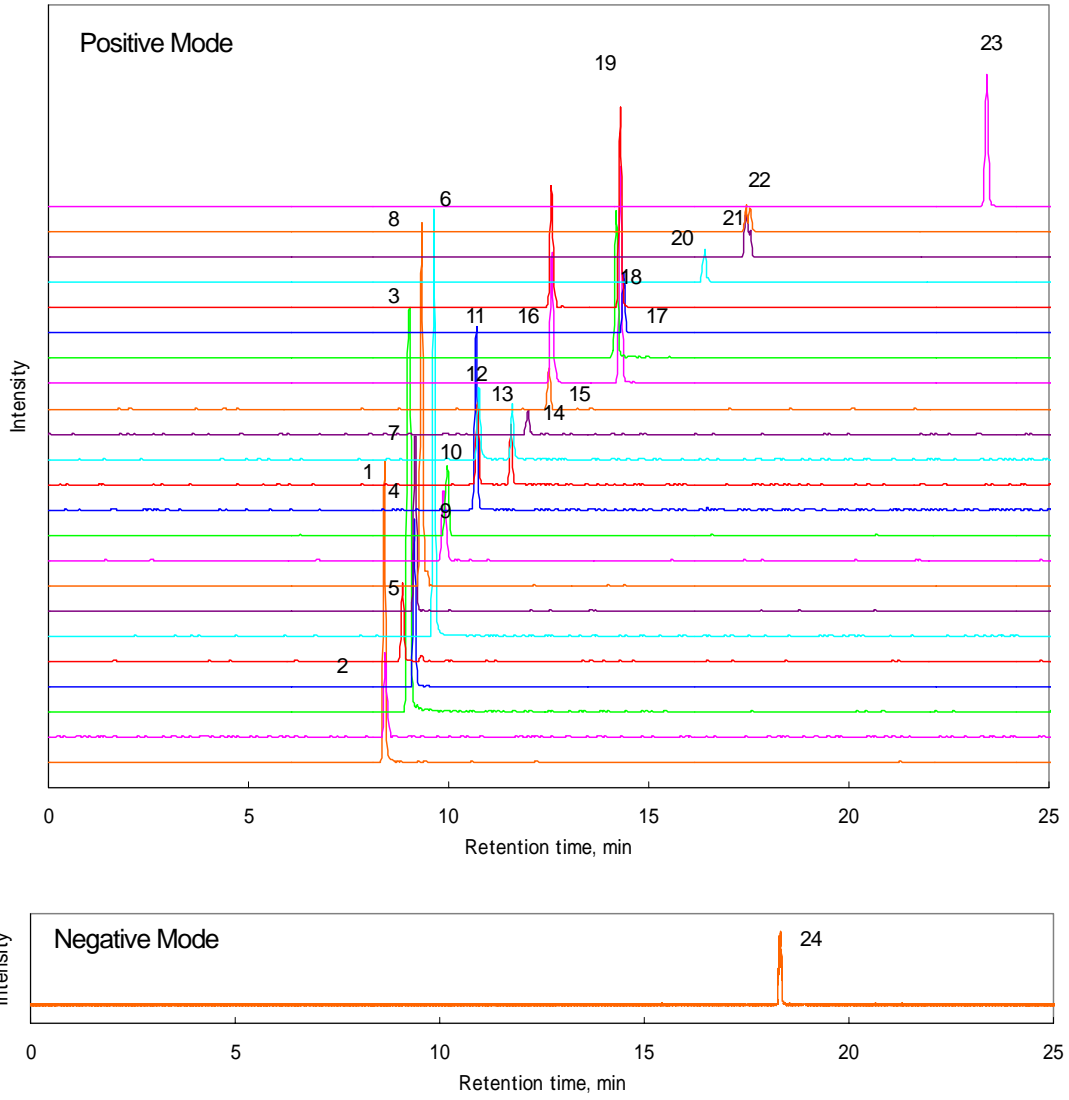


Figure 1 標準試料のMRMクロマトグラム