

# InertSearch™ for LC

Inertsil™ Applications

## Simultaneous analysis of bile acids using LC/MS/MS

Data No. LL030-0000

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### Conditions

**Column** : InertSustain C18  
(2  $\mu$  m, 150 x 2.1 mm I.D.)  
**Column Cat. No.** : 5020-14355  
**Eluent** : A) 0.1% HCOOH in H<sub>2</sub>O  
B) CH<sub>3</sub>CN/CH<sub>3</sub>OH/HCOOH = 50/50/0.1, v/v/v

Time(min)	A(vol%)	B(vol%)
0	60	40
10	45	55
20	0	100

**Flow rate** : 0.4 mL/min  
**Col. Temp.** : 40 °C  
**Detection** : MS/MS (ESI, Negative, MRM)  
**Injection Vol.** : 5  $\mu$  L  
**Sample** : Standard solution

Analyte	Precursor ion (m/z)	Product ion (m/z)
1. Taurine-conjugated $\alpha$ -muricholic acid (TaMCA)	514.2	80.0
2. Taurine-conjugated $\omega$ -muricholic acid (TwMCA)	514.2	80.0
3. Taurine-conjugated $\beta$ -muricholic acid (TbMCA)	514.2	80.0
4. Taurine-conjugated $\gamma$ -muricholic acid (THCA)	514.2	80.0
5. Taurine-conjugated ursodeoxycholic acid (TUDCA)	498.2	80.0
6. Taurine-conjugated hyodeoxycholic acid (THDCA)	498.2	80.0
7. Glycine-conjugated $\alpha$ -muricholic acid (GaMCA)	464.2	74.0
8. Glycine-conjugated $\beta$ -muricholic acid (GbMCA)	464.2	74.0
9. Taurine-conjugated cholic acid (TCA)	514.2	80.0
10. Glycine-conjugated $\gamma$ -muricholic acid (GHCA)	464.2	74.0
11. Glycine-conjugated ursodeoxycholic acid (GUDCA)	448.2	74.0
12. $\omega$ -Muricholic acid ( $\omega$ MCA)	453.2	407.2
13. Glycine-conjugated hyodeoxycholic acid (GHDCA)	448.2	74.0
14. $\alpha$ -Muricholic acid ( $\alpha$ MCA)	453.2	407.2
15. Taurine-conjugated chenodeoxycholic acid (TCDCa)	498.2	80.0
16. $\beta$ -Muricholic acid ( $\beta$ MCA)	453.2	407.2
17. Glycine-conjugated cholic acid (GCA)	464.2	74.0
18. Taurine-conjugated deoxycholic acid (TDCA)	498.2	80.0
19. $\gamma$ -Muricholic acid (HCA)	453.2	407.2
20. Ursodeoxycholic acid (UDCA)	437.2	391.2
21. Hyodeoxycholic acid (HDCA)	437.2	391.2
22. Taurine-conjugated lithocholic acid (TLCA)	482.2	80.0
23. Cholic acid (CA)	453.2	407.2
24. Glycine-conjugated chenodeoxycholic acid (GCDCA)	448.2	74.0
25. Glycine-conjugated deoxycholic acid (GDCA)	448.2	74.0
26. Chenodeoxycholic acid (CDCA)	437.2	391.2
27. Glycine-conjugated lithocholic acid (GLCA)	432.2	74.0
28. Deoxycholic acid (DCA)	437.2	391.2
29. Lithocholic acid (LCA)	421.3	391.2

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