

Bile Acid	Abbreviations	$m/z \pm 0.01$ Da	RT $\pm$ 0.2 min	Internal Standard used for Quantification
Lithocholic acid	LCA	375.2894	10.51	LCA-d <sub>5</sub>
Lithocholic acid-d <sub>5</sub>	LCA-d <sub>5</sub>	380.3202	10.5	N/A
Deoxycholic acid	DCA	391.2857	9.22	DCA-D <sub>6</sub>
Ursodeoxycholic acid	UDCA	391.2857	8.27	DCA-D <sub>6</sub>
Chenodeoxycholic acid	CDCA	391.2857	9.08	CDCA-d <sub>4</sub>
Chenodeoxycholic acid-d <sub>4</sub>	CDCA-d <sub>4</sub>	395.3089	9.08	N/A
Deoxycholic acid-d <sub>6</sub>	DCA-D <sub>6</sub>	397.3213	9.19	N/A
Cholic acid	CA	407.2804	8.03	CA-d <sub>5</sub>
Muricholic acid alpha	MCA alpha	407.2804	7.49	CA-d <sub>5</sub>
Muricholic acid beta	MCA beta	407.2804	7.66	CA-d <sub>5</sub>
Muricholic acid gamma	MCA gamma	407.2804	7.84	CA-d <sub>5</sub>
Cholic acid-d <sub>5</sub>	CA-d <sub>5</sub>	412.31	8.02	N/A
Glycochenodeoxycholic acid	GCDCA	448.3062	8.2	CDCA-d <sub>4</sub>
Glycodeoxycholic acid	GDCA	448.3062	8.35	DCA-D <sub>6</sub>
Glycoursodeoxycholic acid	GUDCA	448.3062	7.44	CDCA-d <sub>4</sub>
Glycocholic acid	GCA	464.3014	7.34	CA-d <sub>5</sub>
Taurolithocholic acid	TLCA	482.2935	9.48	TLCA-d <sub>4</sub>
Taurolithocholic acid-d <sub>4</sub>	TLCA-d <sub>4</sub>	486.3181	9.48	N/A
Taurochenodoxycholic acid	TCDCA	498.2891	8.19	TCDCA-d <sub>4</sub>
Taurodeoxycholic acid	TDCA	498.2891	8.37	TDCA-d <sub>4</sub>
Tauroursodeoxycholic acid	TDCA	498.2891	7.37	TUDCA-d <sub>4</sub>
Taurochenodoxycholic acid-d <sub>4</sub>	TCDCA-d <sub>4</sub>	502.313	8.19	N/A
Taurodoxycholic acid-d <sub>4</sub>	TDCA-d <sub>4</sub>	502.313	8.37	N/A
Tauroursodeoxycholic acid-d <sub>4</sub>	TUDCA-d <sub>4</sub>	502.313	7.36	N/A
Taurocholic acid	TCA	514.2843	7.35	TCA-d <sub>4</sub>
Tauromuricholic acid alpha	TMCA alpha	514.2843	6.66	TCA-d <sub>4</sub>
Tauromuricholic acid beta	TMCA beta	514.2843	6.75	TCA-d <sub>4</sub>
Tauromuricholic acid gamma	TMCA gamma	514.2843	7.02	TCA-d <sub>4</sub>
Taurocholic acid-d <sub>4</sub>	TCA-d <sub>4</sub>	518.3079	7.35	N/A

**Supplementary Table 1. LC-MS Bile Acid Analysis mass-to-charge ratios ( $m/z$ ), Retention Times (RTs), and Internal Standards used for Quantification. Abbreviation: N/A, not applicable.**