


BILE ACIDS

IsoSciences Offers a Full Set of Unlabeled and Labeled Bile Acids



The two primary bile acids, cholic acid and chenodeoxycholic acid, are oxidized from cholesterol in the liver. In the intestine, the primary bile acids are then dehydroxylated to the secondary bile acids; cholic acid to deoxycholic acid and chenodeoxycholic acid to lithocholic acid and ursodeoxycholic acid. The two primary and three secondary bile acids can also be converted to their glycine and taurine conjugates to increase water solubility. By choosing Chenodeoxycholic Acid-[²H₉] (mw 401.5), Deoxycholic Acid-[²H₆] (mw 398.5) and Ursodeoxycholic Acid-[²H₄] (mw 396.5) one can differentiate the three bile acids even though the unlabelled standards all share the molecular weight of 392.5. This allows for clear determination and identification of each bile acid, as well as the glycine and taurine conjugates.

Primary Bile Acids

Catalog #	Compound Name	Price	Price (1mL of 100µg/mL)
13098UNL	Cholic Acid	\$55/50mg	Inquire
13098	Cholic Acid-[d ₃]	\$185/50mg	\$103
13101UNL	Chenodeoxycholic Acid	\$82/50mg	Inquire
13101	Chenodeoxycholic Acid-[d ₃]	\$223/50mg	\$103
13103	Chenodeoxycholic Acid-[d ₃]	\$380/10mg	\$272

Secondary Bile Acids

Catalog #	Compound Name	Price	Price (1mL of 100µg/mL)
13100UNL	Deoxycholic Acid	\$55/50mg	Inquire
13100	Deoxycholic Acid-[d ₃]	\$130/10mg	\$163
13227	Deoxycholic Acid-[d ₆]	\$353/10mg	\$272
13099UNL	Lithocholic Acid	\$55/50mg	Inquire
13099	Lithocholic Acid-[d ₃]	\$217/50mg	\$163
13102UNL	Ursodeoxycholic Acid	\$55/50mg	Inquire
13102	Ursodeoxycholic Acid-[d ₃]	\$288/50mg	\$103



Coming Soon: Bile Acid Glucuronides



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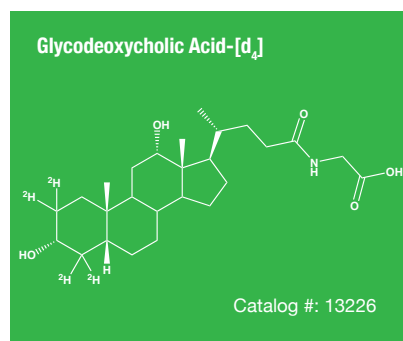
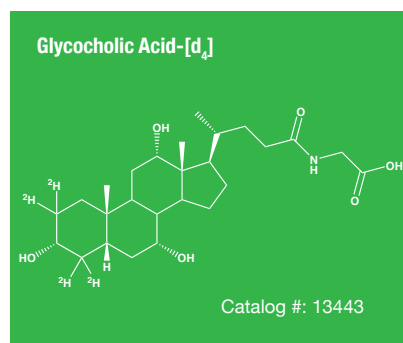
BILE ACIDS



Specialists in the isotopically labeled internal standards and metabolites offering the largest selection of Bile Acids

Primary Bile Acid Conjugates

Catalog #	Compound	Price	Price (1mL of 100µg/mL)
13443UNL	Glycocholic Acid	\$55/50mg	Inquire
13443	Glycocholic Acid-[d ₄]	\$207/10mg	\$163
13232UNL	Taurocholic Acid Sodium Salt Hydrate	\$55/50mg	Inquire
13232	Taurocholic Acid-[d ₄] Sodium Salt	\$532/10mg	\$272
13104UNL	Sodium Glycochenodeoxycholate	\$55/10mg	Inquire
13104	Glycochenodeoxycholic Acid-[d ₄]	\$207/10mg	\$163
13108	Glycochenodeoxycholic Acid-[d ₉]	\$424/10mg	\$272
13105UNL	Sodium Taurochenodeoxycholate	\$109/50mg	Inquire
13105	Taurochenodeoxycholic Acid-[d ₄] Sodium Salt	\$532/10mg	\$272
13107	Taurochenodeoxycholic Acid-[d ₉] Sodium Salt	\$532/5mg	\$272



Secondary Bile Acid Conjugates

Catalog #	Compound	Price	Price (1mL of 100µg/mL)
13226UNL	Sodium Glycodeoxycholate	\$55/50mg	Inquire
13226	Glycodeoxycholic Acid-[d ₄]	\$250/10mg	\$163
13229	Glycodeoxycholic Acid-[d ₉]	\$402/10mg	\$272
13225UNL	Sodium Taurodeoxycholate Hydrate	\$55/50mg	Inquire
13225	Taurodeoxycholic Acid-[d ₄] Sodium Salt	\$532/10mg	\$272
13228	Taurodeoxycholic Acid-[d ₉] Sodium Salt	\$532/10mg	\$272
13231UNL	Glycolithocholic Acid Sodium Salt	\$163/50mg	Inquire
13231	Glycolithocholic Acid-[d ₄]	\$260/10mg	\$163
13230UNL	Sodium Tauroolithocholate	\$55/50mg	Inquire
13230	Tauroolithocholic Acid-[d ₄] Sodium Salt	\$532/10mg	\$272
13224UNL	Glycoursodeoxycholic Acid	\$109/50mg	Inquire
13224	Glycoursodeoxycholic Acid-[d ₄]	\$201/10mg	\$163
13106UNL	Tauroursodeoxycholic Acid Dihydrate	\$163/50mg	Inquire
13106	Tauroursodeoxycholic Acid-[d ₄] Sodium Salt	\$532/10mg	\$272

Analytical Capabilities

- **PURITY**
Access by HPLC, ELSD or GC
- **STRUCTURAL**
Determination by ¹H and ¹³C NMR
- **ISOTOPE INCORPORATION**
Calculated by LC-MS/MS, LC-MS or GC-MS



IsoSciences as an innovator, specializing in the production of isotopically labeled internal standards for mass spec analysis, has been fulfilling the market demands for stable isotope labeled reference compounds, advanced intermediates, final drug substances and metabolites for over 15 years.

Now Available Full Panel of Bile Acid Sulfates

Primary Bile Acid Sulfates

Catalog #	Compound Name	Price
13098UNL3S0	Cholic Acid-3-Sulfate Sodium Salt	\$109
130983S0	Cholic Acid-[d ₃]-3-Sulfate Sodium Salt	\$239
131013S0	Chenodeoxycholic Acid-3-Sulfate Sodium Salt	\$195
13101UNL3S0	Chenodeoxycholic Acid-[d ₃]-3-Sulfate Sodium Salt	\$109

Secondary Bile Acid Sulfates

Catalog #	Compound Name	Price
13100UNL3S0	Deoxycholic Acid-3-Sulfate Sodium Salt	\$109
131003S0	Deoxycholic Acid-[d ₃]-3-Sulfate Sodium Salt	\$239
13099UNL3S0	Lithocholic Acid-3-Sulfate Sodium Salt	\$55
130993S0	Lithocholic Acid-[d ₃]-3-Sulfate Sodium Salt	\$109
13102UNL3S0	Ursodeoxycholic Acid-3-Sulfate Sodium Salt	\$55
131023S0	Ursodeoxycholic Acid-[d ₃]-3-Sulfate Sodium Salt	\$380

Our Deuterated Internal Standards Contain no M+0

Competitive Advantages

1. INCREASED TESTING ACCURACY:

When shifting to ¹³C and ¹⁵N isotopes, customers are assured a superior internal standard that co-elutes with the analyte. The isotopes are placed in non-exchangeable positions and in desired molecular fragments to ensure the internal standard allows for accurate measurements.

2. CORRECTS FOR SAMPLE VARIATION:

Why co-elute? An internal standard is used to correct for injection to injection variation. The internal standard is unable to correct for ion suppression and matrix effects without co-elution.

3. COMPLETE CERTIFICATE OF ANALYSIS:

A complete Certificate of Analysis is issued with every compound. This includes structural identity by ¹H-NMR and ¹³C-NMR, purity assessment by HPLC-UV, GC-FID or HPLC-ELSD and isotope incorporation by LC-MS or GC-MS

4. HIGH PURITY:

IsoSciences compounds routinely analyze over 98% pure and 98% isotope incorporation with no unlabeled material detected.





Coming Soon: Conjugated Muricholic Acids

Secondary Bile Acid Sulfate Conjugates

Catalog #	Compound Name	Price
13226UNL3SO	Sodium Glycodeoxycholate-3-Sulfate Sodium Salt	\$82
132263SO	Glycodeoxycholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$272
13225UNL3SO	Sodium Taurodeoxycholate-3-Sulfate Sodium Salt	\$82
132253SO	Taurodeoxycholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$327
13231UNL3SO	Glycolithocholic Acid-3-Sulfate Sodium Salt	\$185
132313SO	Glycolithocholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$185
13230UNL3SO	Sodium Tauroolithocholate-3-Sulfate Sodium Salt	\$152
132303SO	Tauroolithocholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$327
13224UNL3SO	Glycoursodeoxycholic Acid-3-Sulfate Sodium Salt	\$92
132243SO	Glycoursodeoxycholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$380
13106UNL3SO	Tauroursodeoxycholic Acid-3-Sulfate Sodium Salt	\$130
131063SO	Tauroursodeoxycholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$380

New Muricholic Acids

Catalog #	Compound Name	Price
18010	β-Muricholic Acid	\$105
18011	α-Muricholic Acid	\$105
18012	γ-Muricholic Acid	\$105
18015	ω-Muricholic Acid	\$105
18034	β-Muricholic Acid-[d5]	\$184
18035	α-Muricholic Acid-[d5]	\$184
18036	γ-Muricholic Acid-[d5]	\$184
18037	ω-Muricholic Acid-[d5]	\$210

IsoSciences implements advanced quality processes providing our customers the best solution that meets their specs. We are ISO 9001 certified with extensive analytical capabilities.

Primary Bile Acid Sulfate Conjugates

Catalog #	Compound Name	Price
13443UNL3SO	Glycocholic Acid-3-Sulfate Sodium Salt	\$82
134433SO	Glycocholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$260
13232UNL3SO	Taurocholic Acid-3-Sulfate Sodium Salt	\$82
132323SO	Taurocholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$260
13104UNL3SO	Sodium Glycochenodeoxycholate-3-Sulfate Sodium Salt	\$120
131043SO	Glycochenodeoxycholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$260
13105UNL3SO	Sodium Taurochenodeoxycholate-3-Sulfate Sodium Salt	\$82
131053SO	Taurochenodeoxycholic Acid-[d ₄]-3-Sulfate Sodium Salt	\$282

Bile Acid Substrates

Catalog #	Compound Name
19013	7α,12α-Dihydroxy-3-oxo-cholest-4-en-26-oic Acid
19014	3α,7α-dihydroxy-5β-cholestan-26-oic Acid
19015	7α-hydroxy-3-oxo-cholest-4-en-26-oic Acid
18123	7α,12α-dihydroxy-5β-cholestan-3-one
18125	7α,12α-dihydroxycholest-4-en-3-one
19016	7α-hydroxy-5β-cholestan-3-one
19017	7α-hydroxycholest-4-en-3-one