# **PRODUCT INFORMATION**



## 7-keto Deoxycholic Acid

Item No. 35264

CAS Registry No.: 911-40-0

(5β)-3α,12α-dihydroxy-7-oxo-cholan-Formal Name:

24-oic acid

Synonyms: 5β-Cholanic Acid-3α,12α-diol-7-one,

7-keto DCA

MF:  $C_{24}H_{38}O_5$ FW: 406.6 **Purity:** ≥98%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### **Laboratory Procedures**

7-keto Deoxycholic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 7-keto deoxycholic acid in the solvent of choice, which should be purged with an inert gas. 7-keto Deoxycholic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 7-keto deoxycholic acid in these solvents is approximately 15, 2, and 10 mg/ml, respectively.

#### Description

7-keto Deoxycholic acid is a metabolite of the primary bile acid cholic acid (Item No. 20250).<sup>1,2</sup> Fecal levels of 7-keto deoxycholic acid are elevated in rats fed a diet supplemented with cholic acid compared with rats fed a control diet or a diet supplemented with cholesterol (Item No. 9003100).<sup>1</sup> Hepatic levels of 7-keto deoxycholic acid are elevated in a mouse model of ethanol-induced alcoholic liver disease.<sup>3</sup>

### References

- 1. Sakai, K., Makino, T., Kawai, Y., et al. Intestinal microflora and bile acids. Effect of bile acids on the distribution of microflora and bile acid in the digestive tract of the rat. Microbiol. Immunol. 24(3), 187-196
- 2. Hirano, S., Masuda, N., Oda, H., et al. Transformation of bile acids by Clostridium perfringens. Appl. Environ. Microbiol. 42(3), 394-399 (1981).
- 3. Charkoftaki, G., Tan, W.Y., Berrios-Carcamo, P., et al. Liver metabolomics identifies bile acid profile changes at early stages of alcoholic liver disease in mice. Chem. Biol. Interact. 360, 109931 (2022).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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