



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

Deoxycholic acid SigmaUltra

Product Number **D 4297**
Store at Room Temperature

Product Description

Molecular Formula: $C_{24}H_{40}O_4$
Molecular Weight: 392.6
CAS Number: 83-44-3
 pK_a : 6.58¹
 λ_{max} : 310 nm²
Extinction Coefficient: $E^{1\%}_{1cm} = 9.4$
Specific Rotation: +55° (1 g/100 ml in ethanol at 20 °C)
Synonyms: ADH C¹

Trace elemental analyses have been performed on the SigmaUltra deoxycholic acid. The certificate of analysis provides lot-specific results. SigmaUltra deoxycholic acid is for applications which require tight control of elemental content.

The CMC is 0.21% (5 mM) and it is considered to be readily dialyzable.³

Deoxycholic acid has been used in a modified procedure to recover 40-80% of a protein from a 1 µg/ml solution.⁴

Deoxycholic acid forms molecular coordination compounds (so-called choleic acids) with many substances. Complexes with fatty acids have been studied extensively.¹

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

The free acid is soluble at 0.24 g/L in water at 15 °C, while the sodium salt is soluble at >333 g/L in water at 15 °C. Therefore, pH control is very important to the use of this product. Aqueous solutions precipitate as the pH is lowered to 5.¹

References

1. The Merck Index, 12th Ed., Entry# 2946.
2. Arch. Biochem. Biophys., **59**, 213 (1955).
3. Protein Purification Applications: A Practical Approach, Harris, E., and Angal, S., ed., IRL Press (New York, NY: 1990), p. 71.
4. Mahuran, D., et al., A High Recovery Method for Concentrating Microgram Quantities of Protein from Large Volumes of Solution. Anal. Biochem., **129**, 513-516 (1983).

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