# Data Sheet (Cat.No.TN7120)

## 7-keto-deoxycholic acid

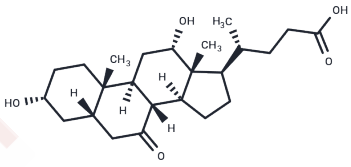
### Chemical Properties

CAS No. : 911-40-0

Formula: C24H38O5

Molecular Weight: 406.56

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.



### Biological Description

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|---|---|
| Description | 7-keto-deoxycholic acid is converted from Lactobacillus and Bifidobacterium with specific condition and from cholic acid in vitro. |
| Targets(IC50) | Others,Drug Metabolite |
| In vitro | Under anaerobic incubation, Eubacterium lentum-like c-25 converts 3.7% of cholic acid (2 mM) to 7-keto-deoxycholic acid and 1.1% cholic acid (150 mg/mL) to 7-keto-deoxycholic acid[1]. |

### Solubility Information

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|---|---|
| Solubility | DMSO: 100 mg/mL (245.97 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (24.6 mM),Solution.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.4597 mL | 12.2983 mL | 24.5966 mL |
| 5 mM | 0.4919 mL | 2.4597 mL | 4.9193 mL |
| 10 mM | 0.246 mL | 1.2298 mL | 2.4597 mL |
| 50 mM | 0.0492 mL | 0.246 mL | 0.4919 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Takahashi T, et al. Absence of cholic acid 7 alpha-dehydroxylase activity in the strains of Lactobacillus and Bifidobacterium. J Dairy Sci. 1994 Nov;77(11):3275-86.
Sutherland JD, et al. The metabolism of primary, 7-oxo, and 7 beta-hydroxy bile acids by Clostridium absonum. J Lipid Res. 1982 Jul;23(5):726-32.
Morotomi M, Kawai Y, Mutai M. Intestinal microflora and bile acids. In vitro cholic acid transformation by mixed fecal culture of rats. Microbiol Immunol. 1979;23(9):839-47.