



Glycodeoxycholic acid (hydrate)

Cat. No.:	OB0626WX-2232
Appearance:	Crystalline solid
Purity:	≥95%
Identity:	Confirmed by IR and TLC.
Size:	100 mg; 250 mg; 500 mg; 1 g

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	Glycodeoxycholic acid is a glycine-conjugated secondary bile acid that modulates vascular and metabolic homeostatic pathways. This amphiphilic sterol derivative influences smooth muscle myogenic tone, regulates hepatic cytochrome P450 transcription, and exhibits marked systemic concentration increases in acute hepatic injury and respiratory pathologies.
Synonyms	N-[(3 α ,5 β ,12 α)-3,12-dihydroxy-24-oxocholan-24-yl]-glycine, monohydrate; GDCA; 1079043-81-4; Glycodeoxycholic acid free acid; Glycodeoxycholic acid monohydrate; Glycodeoxycholic acid (monohydrate); 2-[[[(4R)-4-[(3R,5R,8R,9S,10S,12S,13R,14S,17R)-3,12-dihydroxy-10,13-dimethyl-2,3,4,5,6,7,8,9,11,12,14,15,16,17-tetradecahydro-1H-cyclopenta[a]phenanthren-17-yl]pentanoyl]amino]acetic acid;hydrate; 2-((R)-4-[(3R,5R,8R,9S,10S,12S,13R,14S,17R)-3,12-dihydroxy-10,13-dimethylhexadecahydro-1H-cyclopenta[a]phenanthren-17-yl)pentanamido)acetic acid hydrate
CAS No.	1079043-81-4
Compound CID	16219427
Formula	C ₂₆ H ₄₃ NO ₅ • H ₂ O
Formula Weight	467.6

Specification

Solubility in DMSO	10 mg/mL
Solubility in Ethanol	1 mg/mL



Solubility in DMF	10 mg/mL
Solubility in Other Solvents	DMSO:PBS mixture: 0.2 mg/mL
IUPAC Name	2-[[[(4R)-4-[(3R,5R,8R,9S,10S,12S,13R,14S,17R)-3,12-dihydroxy-10,13-dimethyl-2,3,4,5,6,7,8,9,11,12,14,15,16,17-tetradecahydro-1H-cyclopenta[a]phenanthren-17-yl]pentanoyl]amino]acetic acid;hydrate
InChI	InChI=1S/C26H43NO5.H2O/c1-15(4-9-23(30)27-14-24(31)32)19-7-8-20-18-6-5-16-12-17(28)10-11-25(16,2)21(18)13-22(29)26(19,20)3;/h15-22,28-29H,4-14H2,1-3H3,(H,27,30)(H,31,32);1H2/t15-,16-,17-,18+,19-,20+,21+,22+,25+,26-;/m1./s1
InChI Key	DLOTUJUSJVIXDW-YEUHZSMFSA-N
Canonical SMILES	<chem>C[C@H](CCC(NCC(O)=O)=O)[C@@]1([H])CC[C@@]2([H])[C@]3([H])CC[C@]4([H])C[C@H](O)CC[C@]4(C)[C@@]3([H])C[C@H](O)[C@@]21C.O</chem>
Stability	1 year
Storage	Storage at -20°C.
Applications	Glycodeoxycholic acid (hydrate) serves as a reference compound for bile acid metabolism research and targeted metabolomic analysis. It supports LC-MS/MS-based bile acid profiling, investigations of bile acid biotransformation, enterohepatic circulation, and characterization of glycine-conjugated bile acid metabolism.