**Proteins** 

# Glyco-diosgenin

Cat. No.: HY-137179 1402423-29-3 CAS No.:

Molecular Formula:  $C_{56}H_{92}O_{25}$ Molecular Weight: 1165.31

Target: **Biochemical Assay Reagents** 

Pathway: Others

Storage: 4°C, protect from light

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

**Product** Data Sheet

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (85.81 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	0.8581 mL	4.2907 mL	8.5814 mL	
	5 mM	0.1716 mL	0.8581 mL	1.7163 mL	
	10 mM	0.0858 mL	0.4291 mL	0.8581 mL	

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (1.78 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (1.78 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (1.78 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	Glyco-diosgenin is a synthetic surfactant and detergent for extracting proteins from membranes for structure and function studies, and single-particle cryo-electron microscopy (cryoEM) studies of membrane proteins $^{[1][2]}$ .
In Vitro	Glyco-diosgenin (16 h) solubilizes and purifies the twin-arginine translocation BC (TatBC) complex <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **REFERENCES**

[1]. Dalsen L, et, al. In meso cr 25;53(Pt 2):530-535.	ystallogenesis. Compatibility	of the lipid cubic phase with the	synthetic digitonin analogue, glyco-diosgenin. J Appl Crystallogr. 2	2020 Mar
[2]. Wojnowska M,et, al. Precu 2018 Mar 13;57(10):1663-1671		the Twin Arginine Protein Transp	oort Pathway Probed with a New Receptor Complex Preparation. B	iochemistry.
	Caution: Product has n	ot been fully validated for m	edical applications. For research use only.	
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