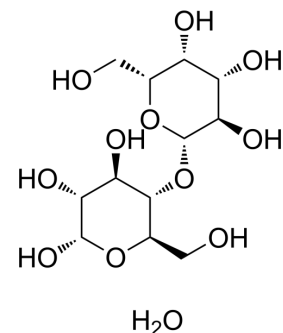


## α-Lactose hydrate

<b>Cat. No.:</b>	HY-W087904		
<b>CAS No.:</b>	5989-81-1		
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>24</sub> O <sub>12</sub>		
<b>Molecular Weight:</b>	360		
<b>Target:</b>	Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (277.78 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7778 mL	13.8889 mL	27.7778 mL
	5 mM	0.5556 mL	2.7778 mL	5.5556 mL
	10 mM	0.2778 mL	1.3889 mL	2.7778 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (6.94 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (6.94 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

α-Lactose (hydrate) (α-D-Lactose (hydrate)) is the principal carbohydrate in the milk of most mammals. α-Lactose (hydrate) consists of glucose and galactose and exists in the form of two anomers, α and β. α-Lactose (hydrate) has many uses in the food and pharmaceutical industries, such as a free-flowing or agglomerating agent, a diluent for pigments, flavors, or enzymes<sup>[1][2][3]</sup>.

### REFERENCES

- [1]. Schuck, et al. Lactose crystallization: determination of α-lactose monohydrate in spray-dried dairy products. (2002).

**Caution: Product has not been fully validated for medical applications. For research use only.**

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