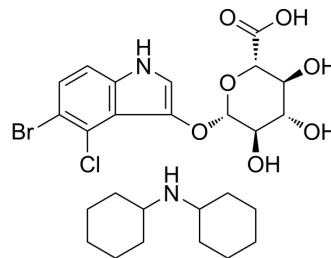


## X-Gluc Dicyclohexylamine

<b>Cat. No.:</b>	HY-15935
<b>CAS No.:</b>	18656-96-7
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>36</sub> BrClN <sub>2</sub> O <sub>7</sub>
<b>Molecular Weight:</b>	603.93
<b>Target:</b>	Fluorescent Dye
<b>Pathway:</b>	Others
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 30 mg/mL (49.67 mM)  
\* "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass	1 mg			5 mg			10 mg		
Preparing Stock Solutions	1 mM		1.6558 mL			8.2791 mL			16.5582 mL		
	5 mM		0.3312 mL			1.6558 mL			3.3116 mL		
	10 mM		0.1656 mL			0.8279 mL			1.6558 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 (4.14 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (4.14 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (4.14 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

X-Gluc Dicyclohexylamine is a dye reagent for the detection of β-glucuronidase, an enzyme produced by Escherichia coli. X-Gluc sodium can be used to detect E. coli contamination in food, water and the urinary tract. X-Gluc sodium is also widely used in molecular biology experiments to label and detect the expression of target genes (GUS reporter system)<sup>[1]</sup>.

#### In Vitro

Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).

- Dissolve 20 mg X-Gluc Dicyclohexylamine in 1mL dimethylformamide (DMF) to prepare X-Gluc master mix.

- 
2. Add the prepared X-Gluc solution to agar medium plates at a final concentration of 50 µg/mL without sterilization.
  3. Allow the plates to air dry and be used to inoculate the organisms.
  4. Incubate the plates at 35°C and observe 16-24 h after inoculation.
- MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

---

[1]. Elon W Frampton, et al. Evaluation of the  $\beta$ -Glucuronidase Substrate 5-Bromo-4-Chloro-3-Indolyl- $\beta$ -D-Glucuronide (X-GLUC) in a 24-Hour Direct Plating Method for *Escherichia coli*. J Food Prot. 1988 May;51(5):402-404.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA