# **PhytoTechnology Laboratories®**

"Helping To Build A Better Tomorrow Through Plant Science"™



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# **Product Information Sheet**

X877 X-Gluc, Monocyclohexyl Ammonium Salt

#### **Properties**

Form:	Powder
Appearance:	White Powder
Application:	Molecular Biology
Solubility:	DMSO or KOH
Typical Working Concentration:	1 mg/mL in staining solution
Storage Temp:	-20 to 0° C
Storage Temp of Stock Solution:	-20 to 0° C

NH<sub>3</sub><sup>+</sup>

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## **Application Notes**

X-Gluc is often used to detect  $\beta$ -glucuronidase (GUS) activity in genetically modified plant tissue.  $\beta$ -glucuronidase is encoded by the gusA (uidA) gene found in *Escherichia* coli. In transformed cells,  $\beta$ -glucuronidase cleaves X-gluc, leaving glucuronic acid and an intermediate indoxyl. The intermediate idoxyl oxdizes and forms an insoluble blue dimer, 5,5'-dibromo-4,4'-dichloro-indigo, indicating GUS activity through blue color.

## **PhytoTechnology Laboratories**®

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