

X-Gluc, 100mg**PG-9190-100mg**

X-Gluc (5-Bromo-4-Chloro-3-Indolyl β -D-Glucuronide) is a chromogenic substrate widely used for the detection of **β -glucuronidase (GUS)** activity in molecular biology, plant biotechnology, microbiology, and genetic research. Upon enzymatic hydrolysis by β -glucuronidase, X-Gluc produces an insoluble blue precipitate, allowing visual localization and analysis of GUS gene expression in tissues and cells.

Details

Product Name	X-Gluc
Chemical Name	5-Bromo-4-Chloro-3-Indolyl β -D-Glucuronide Cyclohexylammonium Salt
Abbreviation	X-Gluc
Molecular Formula	$C_{14}H_{13}BrClNO_7 \cdot C_6H_{14}N$
Molecular Weight	521.8 g/mol
Appearance	Off-white to pale yellow crystalline powder
Purity	$\geq 98\%$ (HPLC)
CAS Number	114162-64-0
Solubility	Soluble in DMF and DMSO; limited solubility in water
Storage Condition	Store at -20°C in a tightly closed container, protected from light and moisture
Shelf Life	Refer to product label
Grade	Molecular Biology Grade
Applications / Uses	Detection of β -glucuronidase (GUS) activity, histochemical staining, reporter gene assays, plant transformation studies, gene expression analysis, microbiological testing, and biotechnology research

Safety

For research use only. Avoid inhalation, ingestion, and contact with skin and eyes. Wear appropriate PPE including gloves, lab coat, and safety goggles. Handle in accordance with good laboratory practices. Store protected from light and moisture.