

Data sheet

X-Gal

(5-bromo-4-chloro-3-indolyl- β -D-galactopyranoside)

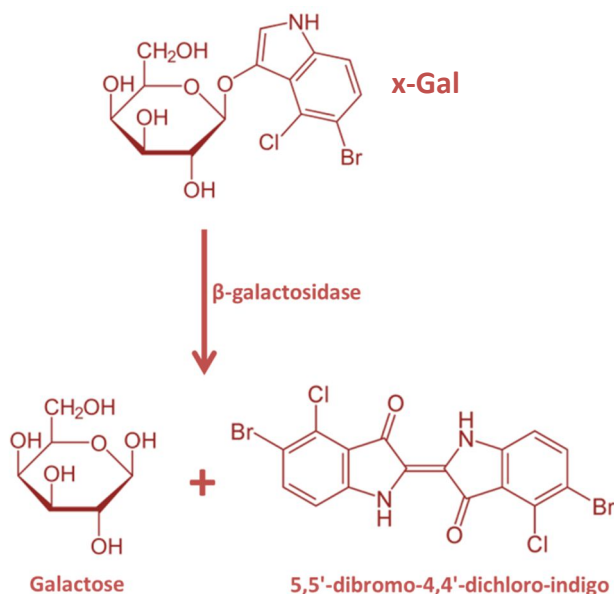
Cat. No: C0043

Cat. No: C0044

Introduction

X-Gal (5-bromo-4-chloro-3-indolyl- β -D-galactopyranoside) is a chromogenic substrate for beta-galactosidase.

β -Galactosidase cleaves the substrate and releases colorless galactose and 5-Bromo-4-chloro-3-indoxyl (X). The indoxyl will be oxidized to the insoluble 5,5'-dibromo-4,4'-dichloro-indigo, forming an intense blue precipitate.



Application

X-Gal, in conjunction with IPTG, is used to detect β -galactosidase activity to differentiate recombinants from nonrecombinants in cloning experiments using vectors containing the lacZ or lacZ α -peptide gene.

PRODUCT USE LIMITATION

This product is developed, designed and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals. Please refer to www.canvaxbiotech.com for Material Safety Data Sheet of the product.

Product Size

| | C0043 | C0044 |
|-------|-------|-------|
| X-Gal | 1g | 5g |

Storage conditions

Upon receipt and for long-term use, store the powder in a tightly closed and desiccated container at **-20°C**. X-Gal is stable for at least 2 years at -20°C if stored properly.

Preparation of a 20 mg/mL stock solution in 100% dimethylformamide (DMF). Store the stock solution at -20°C in the dark. Discard the stock solution if the color changes significantly.

Technical specification

- ✓ CAS Number: **7240-90-6**
- ✓ Chemical Formula: **C₁₄H₁₅BrClNO₆**
- ✓ Molecular Weight: **408.63**
- ✓ Assay (HPLC) > **98% w/w**
- ✓ Purity (HPLC): > **99%**
- ✓ Purity (TLC): **single spot**
- ✓ Water content (Karl Fischer): < **1%**
- ✓ Identity (IR): **conforms to structure**
- ✓ Solubility (5% w/v, DMF): **soluble**

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Notes

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