

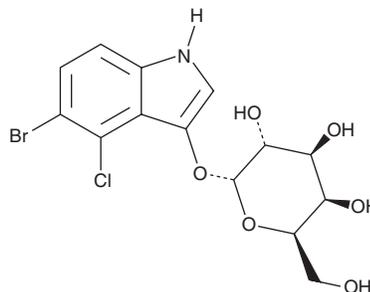
PRODUCT INFORMATION



X- α -Gal

Item No. 36095

CAS Registry No.: 107021-38-5
Formal Name: 5-bromo-4-chloro-1H-indol-3-yl
 α -D-galactopyranoside
Synonym: 5-bromo-4-chloro-3-indolyl- α -
D-Galactopyranoside
MF: C₁₄H₁₅BrClNO₆
FW: 408.6
Purity: \geq 98%
UV/Vis.: λ_{max} : 233 nm
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

X- α -Gal is supplied as a solid. A stock solution may be made by dissolving the X- α -Gal in the solvent of choice, which should be purged with an inert gas. X- α -Gal is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of X- α -Gal in DMSO is approximately 14 mg/ml and approximately 3 mg/ml in DMF. X- α -Gal is slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of X- α -Gal can be prepared by directly dissolving the solid in aqueous buffers. The solubility of X- α -Gal in PBS (pH 7.2) is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

X- α -Gal is a chromogenic substrate for α -galactosidase.¹ Upon cleavage by α -galactosidase, a blue pigment is released that can be used as a marker of α -galactosidase activity. X- α -Gal has been used in the identification of *S. cerevisiae* and *S. bayanus* hybrid yeast.²

References

1. Goddard, A., Ladds, G., and Davey, J. Development of a semi-quantitative plate-based α -galactosidase gene reporter for *Schizosaccharomyces pombe* and its use to isolate a constitutively active Mam2. *Yeast* **22**(1), 31-41 (2005).
2. Sato, M., Kishimoto, M., Watari, J., *et al.* Breeding of brewer's yeast by hybridization between a top-fermenting yeast *Saccharomyces cerevisiae* and a cryophilic yeast *Saccharomyces bayanus*. *J. Biosci. Bioeng.* **93**(5), 509-511 (2002).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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