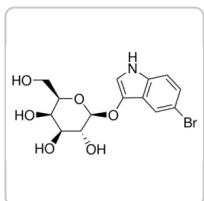


Type in Product Names, Product Numbers, or CAS Numbers to see suggestions.



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Documents

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B2904 ▶ **Sigma-Aldrich®**

Bluo-Gal

reagent for selection of recombinant bacterial clones

Synonym(s):

5-Bromo-3-indolyl β-D-galactopyranoside, substrate for β-galactosidase, Bluo-Gal

Empirical Formula (Hill Notation):

C₁₄H₁₆BrNO₆

CAS Number: **97753-82-7**

Molecular Weight: 374.18

Beilstein: 1550140

MDL number: **MFCD00063691**

PubChem Substance ID: **24891417**

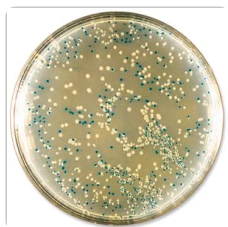
NACRES: NA.85

SKU	Pack Size	Availability	Price	Quantity
B2904-100MG	100 MG	Only 1 left in stock (more on the way) Details...	€233.00	− + 📘
B2904-500MG	500 MG	Only 4 left in stock (more on the way) Details...	€909.00	− + 📘

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RECOMMENDED PRODUCTS

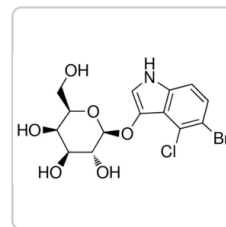


Sigma-Aldrich

B3928

Blue-White Select™ Screening Reagent
for selection of recombinant bacterial clones

[View Price and Availability](#)



Roche

XGAL-RO

X-Gal

solubility: in DMF, soluble, solubility: in methanol, soluble,
storage temp.: 2-8°C

[View Price and Availability](#)

PROPERTIES

grade	for molecular biology
Quality Level	200
sterility	non-sterile
assay	≥98% (HPLC)
form	powder
solubility	DMF: soluble
suitability	suitable for substrate for β-galactosidase
storage temp.	-20°C

SMILES string

OC[C@H]1O[C@@H](Oc2c[nH]c3ccc(Br)cc23)[C@H](O)[C@@H](O)[C@H]1O

InChI

1S/C14H16BrNO6/c15-6-1-2-8-7(3-6)9(4-16-8)21-14-13(20)12(19)11(18)10(5-17)22-14/h1-4,10-14,16-20H,5H2/t10-,11+,12+,13-,14-/m1/s1

InChI key

LINMATFDVHBYOS-MBJXGIAVSA-N

Looking for similar products? Visit [Product Comparison Guide](#)

DESCRIPTION

General description

Bluo-Gal is a chromogenic substrate for β -galactosidase, used to determine the presence or absence of a cloned DNA insert in bacteria growing on agar plates. Bluo-Gal is designed to replace X-Gal in blue-white selection of recombinant bacterial colonies with the lac⁺ phenotype.

Application

Bluo-Gal is suitable for use in selection of recombinant bacterial colonies with the lac⁺ phenotype. Bluo-Gal is suitable for use as β -galactosidase substrate in the staining of skin tissues for electron microscopy analysis, *Dictyostelium* samples and in the staining of vena cava of adult mice.

Chromogenic substrate suitable for identification of lac⁺ bacterial colonies. An alternative to 5-bromo-4-chloro-3-indolyl β -D-galactopyranoside (X-Gal), producing a darker blue color.

Packaging

100, 500 mg in poly bottle

Principle

When Bluo-Gal is hydrolyzed by β -galactosidase, the resulting product will form a blue precipitate. Lac⁺ colonies grown in the presence of Bluo-Gal turn a deeper blue color more intense than X-Gal, allowing for easy differentiation between lac⁺ and lac⁻ colonies.

RELATED PRODUCTS

Related Product

B6650

X-GlcA, reagent for selection of recombinant bacterial clones

[View Pricing](#)

C4478

S-Gal[®]/LB Agar Blend, reagent for selection of recombinant bacterial clones

[View Pricing](#)

B3928

Blue-White Select[™] Screening Reagent, for selection of recombinant bacterial clones

[View Pricing](#)

B8931

Magenta-Gal, reagent for selection of recombinant bacterial clones

[View Pricing](#)

S9811

S-Gal[®], reagent for selection of recombinant bacterial clones

[View Pricing](#)

S7313

S-Gal[®] sodium salt, reagent for selection of recombinant bacterial clones

[View Pricing](#)

16658

X-GalNAC, reagent for selection of recombinant bacterial clones

[View Pricing](#)

16669

Magenta-Gal, reagent for selection of recombinant bacterial clones

[View Pricing](#)

94433

β-Galactosidase stain

[View Pricing](#)

SAFETY INFORMATION

Storage Class Code

13 - Non Combustible Solids

WGK

WGK 3

Flash Point(F)

Not applicable

Flash Point(C)

Not applicable

Personal Protective Equipment

dust mask type N95 (US),

[Eyeshields](#), [Gloves](#)

DOCUMENTATION

Certificate of Analysis

Enter Lot Number to search for Certificate of Analysis (COA).

Lot Number

e.g. 023J5431

How to enter Lot Number (COA)**Search****Certificate of Origin**

Enter Lot Number to search for Certificate of Origin (COO).

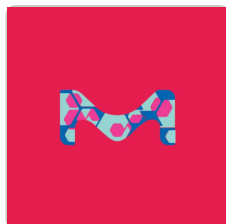
Lot Number

[How to enter Lot Number \(COO\)](#)[Search](#)

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[Structure Search](#)[SDS](#)

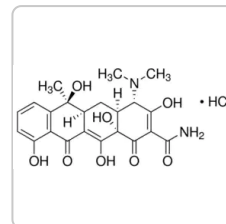
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Sigma-Aldrich

71077**X-Gal Solution - Novagen**

Convenience for blue/white screening

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Sigma-Aldrich

T7660**Tetracycline hydrochloride**

powder, BioReagent, suitable for cell culture

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PEER REVIEWED PAPERS

[Analysis of cell lineage relationships in taste buds.](#)

Leslie M Stone et al.

The Journal of neuroscience : the official journal of the Society for Neuroscience, 22(11), 4522-4529 (2002-06-01)

Taste buds are a heterogeneous population of cells exhibiting diverse morphological and biochemical characteristics. Because taste buds arise from multiple progenitors, the different types of taste cells may represent distinct lineages. The present study was undertaken to determine the following:

Cardiac origin of smooth muscle cells in the inflow tract

Nakano H, et al.

Journal of Molecular and Cellular Cardiology, 50(2), 337-345 (2011)

Ammonium transporter C of Dictyostelium discoideum is required for correct prestalk gene expression and for regulating the choice between slug migration and culmination

Kirsten JH, et al.

Developmental Biology, 287(1), 146-156 (2005)

Delineation of matriptase protein expression by enzymatic gene trapping suggests diverging roles in barrier function, hair formation, and squamous cell carcinogenesis

List K, et al.

The American Journal of Pathology, 168(5), 1513-1525 (2006)

Mouse arylamine N-acetyltransferase 2 (Nat2) expression during embryogenesis: a potential marker for the developing neuroendocrine system.

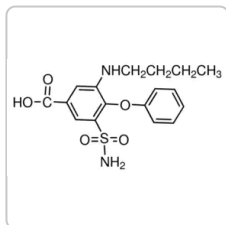
Larissa Wakefield et al.

Biomarkers : biochemical indicators of exposure, response, and susceptibility to chemicals, 13(1), 106-118 (2007-09-27)

Arylamine N-acetyltransferase (NAT) genes in humans and in rodents encode polymorphic drug metabolizing enzymes. Human NAT1 (and the murine equivalent mouse Nat2) is found early in embryonic development and is likely to have an endogenous role. We report the detailed

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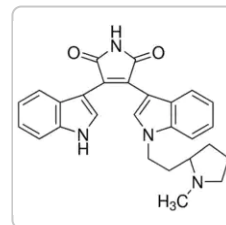
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Sigma-Aldrich

B3023**Bumetanide**

≥98%

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Sigma-Aldrich

B3056**Bisindolylmaleimide II**

≥97% (Mixture of 2 isomers)

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