

Crystal Violet Aqueous Solution (0.5%)

Cat. No.: C774833 | Pack size: 100ml | Storage: Protected from light, Room temperature

Product Description

Crystal Violet, also known as Gentian Violet, is a basic dye soluble in water and ethanol, which stains tissues and cell nuclei purple. It is an excellent staining agent mainly used in cytology, histology, bacteriology, and other fields.

Protocol

I. Sample Preparation

1. For Paraffin Sections

(1) Deparaffinize in xylene for 5–10 min.

(2) Replace with fresh xylene and deparaffinize for another 5–10 min; treat with absolute ethanol for 5 min.

(3) 90% ethanol for 2 min; 70% ethanol for 2 min; distilled water for 2 min.

2. For Frozen Sections

Allow sections to equilibrate to room temperature, then rinse with distilled water for 2 min.

3. For Cultured Cells

(1) Fix with 4% paraformaldehyde for ≥ 10 min (or follow this alternative: add 5 mL of PBS/methanol solution per 25 cm², incubate for 2 min, discard the solution; add 5 mL of fresh methanol, incubate for 10 min, discard the solution).

(2) Rinse with distilled water for 2 min. (3) Replace with fresh distilled water and rinse for another 2 min.

II. Crystal Violet Staining

Stain with 0.5% Crystal Violet Aqueous Solution for 10 min (adjust time according to staining results and requirements).

Wash thoroughly with distilled or tap water, then observe and photograph.

Staining Result

Sample Type	Color
Tissues or Cells	Deep Purple

Precautions

Crystal Violet is harmful to humans, please take appropriate protective measures.

It is recommended to perform a pilot experiment on 1–2 samples when using this reagent for the first time.

For your safety and health, please wear a lab coat and disposable gloves during operation.

Product Information

Item	Information
Cat. No.	C774833
Product Name	Crystal Violet Aqueous Solution (0.5%) - BioReagent, Biological Stain, for microscopy, 0.5%
Grade & Purity	0.5%
Application	Cell Staining
Storage	Protected from light, Room temperature
Shipped In	Normal

Specifications

Parameter	Specification
Specifications & Purity	BioReagent, Biological Stain, for microscopy, 0.5%
Stability And Storage	Store at room temperature long term (12 months). Store in the dark.
Storage	Protected from light, Room temperature
Shipped In	Normal

Safety & Precautions

- Read the current Safety Data Sheet (SDS) before use and follow local laboratory safety and EHS requirements.
- Wear appropriate personal protective equipment, including lab coat, gloves, and eye protection.
- Use only for research and laboratory applications. Do not use for human or animal diagnostics, therapeutics, food, household, or cosmetic applications.
- Protect from light during storage and handling as specified on the product label.

Quality Control

QC Item	Method	Acceptable Range
Appearance	Visual inspection	Solution should be clear and free from visible contamination unless otherwise stated on the COA.
Product identity and specifications	Lot-specific quality testing	Conforms to the approved product specification and certificate of analysis.
Storage and packaging	Label and packaging inspection	Pack size, storage condition, lot number, and expiry information are verified before release.

Troubleshooting

Issue	Possible Causes	Corrective Action
Weak or uneven staining	Insufficient reagent contact, incomplete sample preparation, or expired/contaminated reagent	Ensure complete coverage of the sample, prepare specimens according to the recommended procedure, and use reagent within the labeled shelf life.
Excessive background	Over-staining, inadequate washing, or unsuitable differentiation/dehydration conditions	Optimize staining time and washing steps. Adjust differentiation, dehydration, or clearing according to sample type.
Precipitate or particles observed	Improper storage or contamination during handling	Mix gently before use if appropriate. Do not use if contamination is suspected; consult the lot-specific COA and SDS.

Recommended Applications

Cell Staining.

Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, our regional teams are ready to assist. Please contact the office for your region; for general inquiries, the North American office is the corporate primary.

NORTH AMERICAN SALES, SUPPORT & GENERAL INQUIRIES	EU SALES, LOGISTICS & LOCALIZED SUPPORT
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Limitations & Disclaimer

- For Research Use Only (RUO). Not for use in human or animal diagnostics, therapeutics, or in vivo applications. Not for food, cosmetic, or household use.
- This product is not a CE-marked in vitro diagnostic device under IVDR (EU) 2017/746 and is not an FDA-cleared device under 21 CFR. Use is restricted to verified businesses, institutions, and qualified professionals for research and development purposes.
- Where any component is classified as hazardous under CLP (EC) 1272/2008 or OSHA HCS (29 CFR 1910.1200), the product Safety Data Sheet (SDS) takes precedence over this document for handling, storage, and disposal information.
- Performance depends on sample type, sample condition, handling, and operator technique. Users are responsible for validating the product for their specific application.
- Aladdin product labels, SDS, COA, and approved specifications take precedence over this document. If product formulation, label, SDS, storage conditions, pack size, or quality specifications change, this document should be reviewed and reissued.