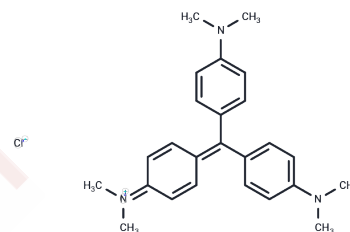


Crystal Violet

Chemical Properties

CAS No. :	548-62-9
Formula:	C ₂₅ H ₃₀ ClN ₃
Molecular Weight:	407.98
Appearance:	no data available
Storage:	keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Crystal Violet (Hexamethylparosaniline chloride) is a triarylmethane dye that is a mixture of violet rosanilinis, with antibacterial, antifungal, and anthelmintic properties.
Targets(IC50)	Antibacterial,DNA,Influenza Virus
Cell Research	<p>Usage method</p> <p>a. Solution preparation: Dissolve 2 g Crystal Violet in 20 mL 95% ethanol solution and mix with 80 mL 1% ammonium oxalate aqueous solution, and use after 24 hours.</p> <p>b. Operation steps:</p> <ol style="list-style-type: none"> 1. Sample processing <ol style="list-style-type: none"> 1) Paraffin sections: First use xylene to dewax for 5-10 min, then use fresh xylene and dewax for another 5-10 min. After dewaxing, use 100% ethanol for 5 min; then use 90% ethanol for 2 min; finally use 70% ethanol for 2 min; ddH2O for 2 min. 2) Frozen sections: distilled water for 2 min. 3) Tissue culture cells: Fix with 4% paraformaldehyde for more than 10 min. Wash with distilled water for 2 min, then use fresh distilled water and wash again for 2 min. 2. Crystal violet staining: After the sample is treated by the above method, add crystal violet staining solution directly and stain at room temperature for 10 minutes (the staining solution needs to cover the sample, and the specific staining time can be adjusted according to the desired staining results). 3. Pour out the staining solution and wash thoroughly with distilled water until no dye is washed off. Dry at room temperature. 4. Observe and take pictures under an optical microscope.

Solubility Information

Solubility	<p>Ethanol: 8 mg/mL (19.61 mM),Sonication is recommended.</p> <p>H2O: 12 mg/mL (29.41 mM),Sonication is recommended.</p> <p>DMSO: 76 mg/mL (186.28 mM),Sonication is recommended.</p> <p>(< 1 mg/ml refers to the product slightly soluble or insoluble)</p>
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4511 mL	12.2555 mL	24.511 mL
5 mM	0.4902 mL	2.4511 mL	4.9022 mL
10 mM	0.2451 mL	1.2256 mL	2.4511 mL
50 mM	0.049 mL	0.2451 mL	0.4902 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

- Nagayama A. Inactivation of influenza A virus by gentian violet (GV) and GV-dyed cotton cloth, and bactericidal activities of these agents. *J Infect Chemother.* 2006 Apr;12(2):73-9.
- Wang H, Mei Y, Luo C, et al. Single-cell analyses reveal mechanisms of cancer stem cell maintenance and epithelial-mesenchymal transition in recurrent bladder cancer. *Clinical Cancer Research.* 2021
- Xu L, Chen X J, Yan Q, et al. Zinc finger protein 180 induces an apoptotic phenotype by activating METTL14 transcriptional activity in colorectal cancer. *Oncology Reports.* 2024, 52(4): 1-18.
- Depletion of circPDSS1 inhibits ITGA11 production to confer cisplatin sensitivity through miR-515-5p in gastric cancer
- Circ_0051079 silencing inhibits the malignant phenotypes of osteosarcoma cells by the TRIM66/Wnt/ β -catenin pathway in a miR-625-5p-dependent manner
- HU H A O, Xu L, Huang T J, et al. Serglycin-Mediated Selective Reactivation of the Novel YAP/CRISPLD2 Developmental Axis Promotes Metastasis and Sorafenib Resistance in Hepatocellular Carcinoma[J]. 2020
- Wang H, Mei Y, Luo C, et al. Single-Cell Analyses Reveal Mechanisms of Cancer Stem Cell Maintenance and Epithelial-Mesenchymal Transition in Recurrent Bladder Cancer. *Clinical Cancer Research.* 2021
- Xu L, Hu H, Zheng L S, et al. ETV4 is a theranostic target in clear cell renal cell carcinoma that promotes metastasis by activating the pro-metastatic gene FOSL1 in a PI3K-AKT dependent manner. *Cancer Letters.* 2020
- Liu X, Hu Q, Wang W, et al. A protein-fragment complementation assay reveals that celastrol and gambogic acid suppress ER α mutants in breast cancer. *Biochemical Pharmacology.* 2021, 188: 114583.
- Wang W, Wang J, Li Y, et al. Circ_0051079 silencing inhibits the malignant phenotypes of osteosarcoma cells by the TRIM66/Wnt/ β -catenin pathway in a miR-625-5p-dependent manner. *Journal of Bone Oncology.* 2022: 100436
- Yang Y, Ge H, Li D, et al. E2F1-Induced lncRNA BAIAP2-AS1 Overexpression Contributes to the Malignant Progression of Hepatocellular Carcinoma via miR-361-3p/SOX4 Axis. *Disease Markers.* 2021, 2021.
- Choi M S, Kim J H, Lee C Y, et al. Gentian Violet Inhibits Cell Proliferation through Induction of Apoptosis in Ovarian Cancer Cells. *Biomedicines.* 2023, 11(6): 1657.
- Li H, Shi W, Shen T, et al. Network pharmacology-based strategy for predicting therapy targets of Ecliptae Herba on breast cancer. *Medicine.* 2023, 102(41): e35384.
- Guo T, Xiong W, Liu C, et al. CircSCNN1A inhibits the proliferation, migration and invasion of renal cell carcinoma cells by decreasing CLDN8 expression through miR-590-5p. *genesis.* 2024, 62(3): e23599.

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