

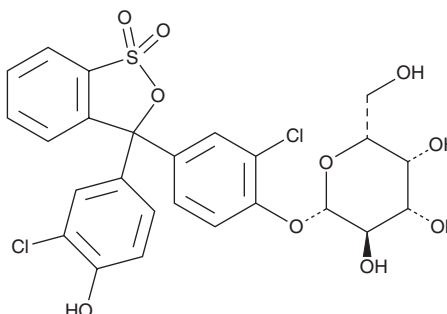
PRODUCT INFORMATION



Chlorophenol Red β -D-Galactopyranoside

Item No. 29707

CAS Registry No.: 99792-79-7
Formal Name: 2-chloro-4-[3-(3-chloro-4-hydroxyphenyl)-1,1-dioxido-3H-2,1-benzoxathiol-3-yl]phenyl β -D-galactopyranoside
Synonym: CPRG
MF: $C_{25}H_{22}Cl_2O_{10}S$
FW: 585.4
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 270, 415 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

Chlorophenol red β -D-galactopyranoside (CPRG) is supplied as a crystalline solid. A stock solution may be made by dissolving the CPRG in the solvent of choice, which should be purged with an inert gas. CPRG is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CPRG in these solvents is approximately 30 mg/ml.

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 CPRG can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of CPRG in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

CPRG is a colorimetric substrate for β -galactosidase.^{1,2} Upon enzymatic cleavage by β -galactosidase, chlorophenol red is released, which can be quantified by colorimetric detection at 570 nm as a measure of β -galactosidase activity

References

1. Sicard, C., Shek, N., White, D., *et al.* A rapid and sensitive fluorimetric β -galactosidase assay for coliform detection using chlorophenol red- β -D-galactopyranoside. *Anal. Bioanal. Chem.* **406**(22), 5395-5403 (2014).
2. Jendresen, C., Daws, M.R., and Nilsson, L.N.G. An improved CPRG colorimetric ligand-receptor signal transduction assay based on beta-galactosidase activity in mammalian BWZ-reporter cells. *J. Pharmacol. Toxicol. Methods* **90**, 67-75 (2018).

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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