

PRODUCT INFORMATION

Eosin B

Item No. 44529

CAS Registry No.: 548-24-3

Formal Name: 6'-dihydroxy-2',7'-dinitro-4',5'-dibromo-3'-spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, disodium salt

Synonyms: Acid Red 91, C.I. 45400, Dibromodinitrofluorescein, Eosin Bluish

MF: $C_{20}H_6Br_2N_2O_9 \cdot 2Na$

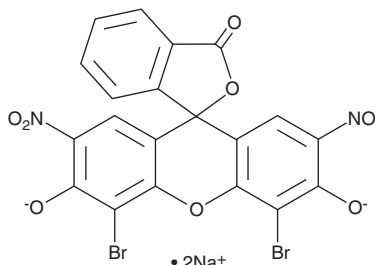
FW: 624.1

Abs./Em.: 514/544 nm

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Eosin B is supplied as a solid. A stock solution may be made by dissolving the eosin B in the solvent of choice, which should be purged with an inert gas. Eosin B is sparingly soluble (1-10 mg/ml) in ethanol and soluble (≥10 mg/ml) in DMSO.

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 eosin B can be prepared by directly dissolving the solid in aqueous buffers. Eosin B is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Eosin B is a xanthene dye and brominated derivative of fluorescein.¹⁻³ It displays absorption/emission maxima of 514/544 nm, respectively.^{2,3} Eosin B has been used as an alternative to eosin Y (Item No. 40128) in hematoxylin and eosin (H&E) staining to stain the extracellular matrix and cytoplasmic proteins.⁴ It inhibits the growth of *P. falciparum* (IC₅₀ = 124 nM).¹

References

1. Massimine, K.M., McIntosh, M.T., Doan, L.T., *et al.* Eosin B as a novel antimalarial agent for drug-resistant *Plasmodium falciparum*. *Antimicrob. Agents Chemother.* **50**(9), 3132-3141 (2006).
2. Kato, H., Komagoe, K., Nakanishi, Y., *et al.* Xanthene dyes induce membrane permeabilization of bacteria and erythrocytes by photoinactivation. *Photochem. Photobiol.* **88**(2), 423-431 (2012).
3. Sabnis, R.W. *Handbook of biological dyes and stains: Synthesis and industrial applications*. First edition. John Wiley & Sons, Inc. Madison, N.J. (2010).
4. Feldman, A.T. and Wolfe, D. Tissue processing and hematoxylin and eosin staining. *Methods Mol. Biol.* **1180**, 31-43 (2014).

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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