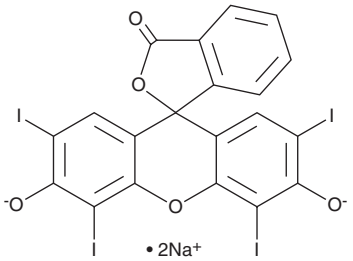
PRODUCT INFORMATION

Erythrosin B

Item No. 31722

CAS Registry No.:	16423-68-0
Formal Name:	3′,6′-dihydroxy-2′,4′,5′,7′-tetraiodo-spiro[isobenzofuran-1(3H),9′-[9H]xanthen]-3-one, disodium salt
Synonyms:	Acid Red 51, Erythrosine, FD&C Red No. 3
MF:	$C_{20}H_6I_4O_5 \bullet 2Na$
FW:	879.9
Purity:	≥85%
UV/Vis.:	λ_{max}: 540 nm
Supplied as:	A crystalline 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

Erythrosin B is supplied as a crystalline solid. A stock solution may be made by dissolving the erythrosin B in the solvent of choice, which should be purged with an inert gas. Erythrosin B is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of erythrosin B 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 erythrosin B can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of erythrosin B in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Erythrosin B is a red fluorescein dye and an inhibitor of dopamine reuptake (IC_{50} = 45 µM in rat brain synaptosomes).[1-3] It has been used in the colorimetric and fluorescent determination of protein concentrations *in vitro*.[1,2] Formulations containing erythrosine B have been used as color additives in food and pharmaceutical preparations.

References

1. Ma, C.Q., Li, K.A., and Tong, S.Y. Determination of proteins by fluorescence quenching of erythrosin B. *Analytica Chimica Acta* **333(1-2)**, 83-88 (1996).
2. Soedjak, H.S. Colorimetric micromethod for protein determination with erythrosin B. *Anal. Biochem.* **220(1)**, 142-148 (1994).
3. Lafferman, J.A. and Silbergeld, E.K. Erythrosin B inhibits dopamine transport in rat caudate synaptosomes. *Science* **205(4404)**, 410-412 (1979).

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