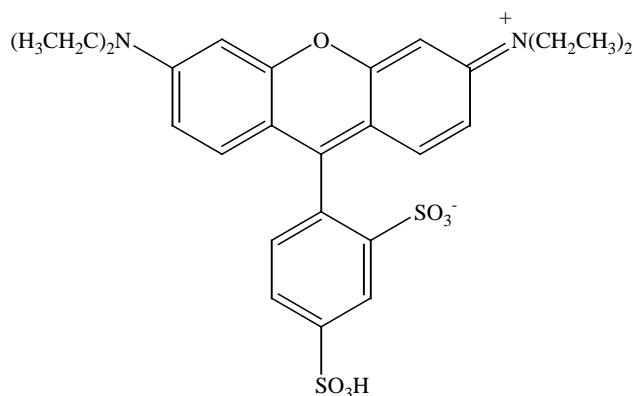


PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: **Sulforhodamine B****CATALOG #:** **80100****MOLECULAR INFORMATION:** C₂₇H₃₀N₂O₇S₂
MWt: 558.7
[2609-88-3]**PROPERTIES:****Color & Form** Red Solid
Purity ≥ 95% by TLC
Solubility Soluble in water.**STORAGE AND HANDLING:**

Store at room temperature. Protect material from light, especially in solution.

APPLICATION:

Sulforhodamine B has been shown to be a superior protein stain for use in the quantification of cellular proteins of cultured cells¹. The intensely colored, water soluble dye is particularly useful for in vitro cell-based screening of anticancer drugs². The dye is believed to bind to basic amino acids of cellular proteins. Thus, colorimetric measurement of the bound dye provides an estimate of the total protein mass that is related to the cell number. The assay method is simple and reproducible, and the end-point measurement is not time-critical, a significant advantage over assays using tetrazolium derivatives. The method is especially applicable to large scale screenings of anticancer drug candidates from natural extracts or synthetic chemicals.

Biotium also offers **sulforhodamine 101(80101)** and **sulforhodamine G(80102)**. In addition to their potential use in cancer drug screening, these fluorescent dyes have been primarily used as polar tracers for the studies of neuronal cell morphology and cell-cell communications³.

Ref: 1) J. Natl. Cancer Inst. 82, 1107(1990). 2) a) J. Natl. Cancer Inst. 82, 1087(1990); b) J. Immunol. Meth. 208, 151(1997). 3) a) Meth. Enzymol. 221, 234(1993); b) J. Biol. Chem. 267, 18424(1992); c) Plant Cell Environ. 17, 257(1994).

TOXICITY:

LD₅₀: 10.3 g/kg, oral, mouse.
Mutation Data: Cytogenic analysis: 13.1 g/L, fibroblast, hamster.
Carcinogenicity: Not listed by NTP, IARC or OSHA.

FIRST AID:	Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.
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Disclaimer: <i>Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use. Biotium is not liable for any damage resulting from handling or contact with this product.</i>
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