

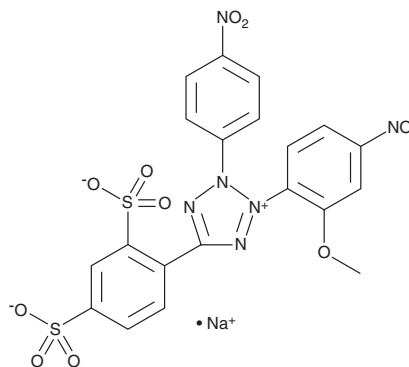
PRODUCT INFORMATION



WST-8

Item No. 18721

CAS Registry No.: 193149-74-5
Formal Name: 5-(2,4-disulfophenyl)-3-(2-methoxy-4-nitrophenyl)-2-(4-nitrophenyl)-2H-tetrazolium, inner salt, monosodium salt
Synonym: Water-Soluble Tetrazolium 8
MF: $C_{20}H_{13}N_6O_{11}S_2 \cdot Na$
FW: 600.5
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 255 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 2 years



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

Laboratory Procedures

WST-8 is supplied as a crystalline solid. A stock solution may be made by dissolving the WST-8 in the solvent of choice. WST-8 is soluble in the organic solvent DMSO, which should be purged with an inert gas. The solubility of WST-8 in DMSO is approximately 1 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 WST-8 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of WST-8 in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

WST-8 is a water-soluble tetrazolium salt used for assessing cell metabolic activity. At neutral pH and in the presence of the intermediate electron acceptor, 1-methoxy phenazine methosulfate, NADPH-dependent cellular oxidoreductases, acting *via* plasma membrane electron transport, reduce the cell-impermeant WST-8 outside the cell to a water-soluble formazan dye with absorbance max at 460 nm.^{1,2} It is typically used as a cell viability indicator in cell proliferation assays.

References

1. Ukeda, H., Kawana, D., Maeda, S., *et al.* Spectrophotometric assay for superoxide dismutase based on the reduction of highly water-soluble tetrazolium salts by xanthine-xanthine oxidase. *Biosci. Biotechnol. Biochem.* **63**(3), 485-488 (1999).
2. Ishiyama, M., Miyazono, Y., Sasamoto, K., *et al.* A highly water-soluble disulfonated tetrazolium salt as a chromogenic indicator for NADH as well as cell viability. *Talanta* **44**, 1299-1305 (1997).

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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