

Thiazolyl Blue Tetrazolium Bromide

CAS Number: 298-93-1

Storage Temperature: 2-8°C

Product Description :

Appearance: Yellow to orange powder.

Molecular Formula: C₁₈H₁₆BrN₅S

Molecular Weight: 414.3

λ max: 378 nm (methanol); 243 nm and 380 nm (water).

Extinction coefficient: EmM= 20.7 (243 nm, water); 7.25 (380 nm, water).

Extinction coefficient (formazan end product): EmM= 13 (578 nm).

Synonyms: MTT; 3-(4,5-dimethylthiazolyl-2)-2, 5-diphenyltetrazoliumbromide; thiazolyl blue; methylthiazolyldiphenyl-tetrazolium bromide

Thiazolyl Blue Tetrazolium Blue (MTT) may be used in measurement of cell proliferation in studies that traditionally use incorporation of radioisotopes as a measurement of cell division.

MTT is a yellowish solution and is converted to water-insoluble MTT-formazan of dark blue color by mitochondrial dehydrogenases of living cells. The blue crystals are solubilized with acidified isopropanol and the intensity is measured colorimetrically at a wavelength of 570 nm. Variations of this procedure have been published by researchers.

Preparation Instructions:

It is soluble in water (10 mg/ml), ethanol (20 mg/ml) and 2-methoxyethanol (20 mg/ml). It is also soluble in buffered salt solutions and culture media (5 mg/ml).

Storage/Stability:

MTT is light sensitive. Reconstituted MTT solution is stable for at least 6 months when stored frozen (-0°C). Storage of a reconstituted MTT solution at 2-8°C for more than 2 weeks may cause decomposition and yield erroneous results.

Precautions and Disclaimer :

For Laboratory Use Only. Not for drug, household or other uses.