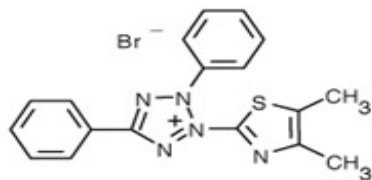


## Product Information Sheet

**M565**  
**MTT**



Synonym: 3-[4,5-Dimethylthiazol-2-yl]-2,5-diphenyltetrazolium Bromide;  
Thiazolyl Blue Tetrazolium Bromide

CAS: 298-93-1

Formula: C<sub>18</sub>H<sub>16</sub>N<sub>5</sub>SBr

Molecular Wt: 414.32

### Properties

Form: Powder

Appearance: Yellow-Orange Fine Powder

Application: Molecular Biology

Solubility: Water @ 10 mg/mL

Typical Working  
Concentration: N/A

Storage Temp: 2 to 6°C

Storage Temp of  
Stock Solution: Stock solution is stable for up to 6 months when stored at -20 to 0°C; stable for approximately 2 weeks when stored at 2 to 6°C. If solution darken it should be discarded.

Other Notes: MTT is light sensitive.

### Application Notes

MTT creates a yellow solution when dissolved in tissue culture media or balance salt solution. The presence of mitochondrial dehydrogenase in living cell reduces MTT to a dark blue formazan that is soluble in acidified isopropanol. The blue MTT-formazan solution is often used in color spectrophotometry for measuring of cell division. It has also been reported that MTT can be used as a histochemical/cytochemical reagent (Pearse and Hess, 1961)

### Reference

Pearse, A.G.E., and Hess, R. (1961). Substantivity and other factors responsible for formazan patterns in dehydrogenase histochemistry. *Experientia*, **17**:136

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