

Toluidine Blue O

Cell Culture Tested

Product Code: TC257

Product Description:

Molecular weight: 305.83

Molecular formula: $C_{15}H_{16}ClN_3S$

CAS NO.: 92-31-9

Synonym: Methylene Blue T50, Tolonium chloride.

Toluidine blue is an acidophilic metachromatic dye that selectively stains acidic tissues components such as sulphates, carboxylates and phosphate radicals. It has high affinity for nucleic acids and polysaccharides. It binds to nuclear material of tissues with high DNA and RNA content. It works on the principle of metachromasia.

Applications:

Metachromatic staining-

Connective tissue mucins - The tissue stains purple to red while the background is stained blue.

Mast cells- Mast cells granules stain red purple due to presence of heparin and histamine

Amyloid cells - Stain blue but under polarized light give a bright red birefringence

Sulfatides - Stained red brown or yellow.

Cartilage - blue

Staining of RNA, oligonucleotides, proteins and glycosaminoglycans

Staining of frozen sections because of rapidity of the staining procedure and better clarity of cells.

Quality Control:

Appearance

Green to black powder.

Solubility

20 ppm in water yields dark blue to blue-purple clear solution.

Loss on drying (105°C; 1 h)

NLT 8.5%

Absorption maximum

620.00 - 640.00 nm (20 ppm in water)

Cell Culture Test

Passes

Storage and Shelf Life:

The powdered form should be stored below 30°C.

Shelf life is 48 months.

Use before expiry date given on the product label.

Disclaimer :

Revision : 03/2025

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