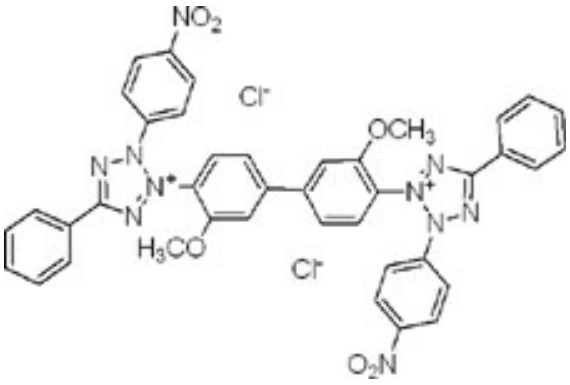

N602
Nitro Blue Tetrazolium

Synonym:	NBT; 2,2'-Di-p-nitrophenyl-5,5'-diphenyl-3,3'-(3,3'-dimethoxy-4,4'-diphenylene)-ditetrazolium Chloride; p-NBT; Nitro BT; Nitrotetrazolium blue chloride; Nitro-TB
CAS:	298-83-9
Formula:	$C_{40}H_{30}Cl_2N_{10}O_6$
Molecular Wt:	817.6

Properties

Form:	Powder
Appearance:	Yellow
Application:	Molecular Biology
Solubility:	Slightly soluble in Water; More soluble in DMSO
Typical Working Concentration:	Varies with application, should be determined by end user.
Storage Temp:	2 to 6°C
Storage Temp of Stock Solution:	A stock solution at 10 mg/mL is stable for 1-2 weeks in the dark at 2 to 6°C.

Application Notes

Commonly used with BCIP (5-bromo-4-chloro-3-indolyl-phosphate) for colorimetric detection of alkaline phosphatase activity.

Also widely used as an indicator of superoxide production. The yellow color of NBT changes to an insoluble purple diformazan upon reaction with superoxide. According to de Maagd et al. (1993), a 0.05% NBT concentration in 10 mM sodium phosphate at a pH of 7.2 can be used to stain *Arabidopsis thaliana* Col-O seedlings for superoxide in a matter of 60 minutes.

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