

Nitrotetrazolium blue



Nitroblue tetrazolium (NBT) is used to detect reducing substances. Reduction of tetrazolium rings in NBT leads to their opening, forming formazan^[1]. In doing so, the absorption spectrum of the substance changes and the originally light yellow color changes to dark blue. The reaction is suitable for spectrophotometric determination.

File:NBT.png
Reduction of
nitrotetrazolium blue
(NBT) to colored formazan

NBT is a fairly widely used reagent. It is used, for example, to determine glycated proteins, a fairly typical application is also the determination of superoxide production in various systems.

Links

References

1. BIELSKI, Benon HJ - SHIUE, Grace G - BAJUK, Stanley. Reduction of nitro blue tetrazolium by CO₂- and O₂- radicals. *Journal of physical chemistry* [online]. 1980, vol. 84, no. 8, p. 830-833, Available from <<https://pubs.acs.org/action/cookieAbsent>>. ISSN 1089-5639. DOI: 10.1021/j100445a006 (<http://dx.doi.org/10.1021%2Fj100445a006>).