

52225 Alkyne MegaStokes dye 673 for copper catalyzed click labeling

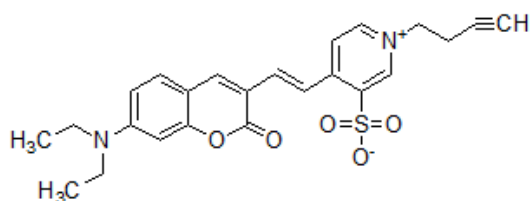
MegaStokes dyes for "click" biological labelling

The MegaStokes dyes for „click“ biological labelling, licensed by LuminoChem are virtually covering the whole visible spectrum reaching the infra-red regime. Besides dyes that are being capable of participating in classical copper catalyzed 1,3-dipolar cycloaddition reaction with the counterparting function, we also provide dyes containing cyclooctyne moiety an alkyne derivative that enables copper free clicking to azides.

These dyes are noteworthy for their large Stokes-shift (120 or 125 nm). Dyes for this kind are exceptionally useful in fluorescence resonance electron transfer (FRET) applications as they do not interfere with the spectral bands of the second fluorophore a common problem in FRET technology. Azido sugars have been used for click-labeling of surface glycoproteins, recently. We have adapted this system to demonstrate the ability of our dyes to undergo bioorthogonal labeling reaction, efficiently. Prior to labeling, Chinese hamster ovary (CHO) cells were incubated MegaStokes dyes to test the possible cytostatic effects of these dyes. Experimental results have shown that neither dye is toxic up to 50 μM concentration. ¹⁾

Properties :

- Clickable functionalities
- Large Stokes-shift
- Soluble in water, ethanol, DMF, DMSO
- Excellent photostability
- Zero net charge
- Exceptional in FRET applications



Ex / em = 540 / 680 nm (in ethanol)
Molar absorbance = 50 000 $\text{M}^{-1}\text{cm}^{-1}$

Storage :

Store at -20°C

Literature :

¹⁾ P. Kele, X. Li, M. Link, K. Nagy, A. Herner, K. Lörlincz, Sz. Béni, O. S. Wolfbeis. *Org. Biomol. Chem.* **2009**, 7, 3486

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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