

Copper(II)-BTTAA complex

<http://www.lumiprobe.com/p/copper-bttaa-complex>

Copper(II)-BTTAA complex is a component of our recommended catalyst for conjugating azides with alkynes using a copper-catalyzed click reaction (CuAAC) in an aqueous medium. This complex is stable and contains divalent copper in the form of 10 mM CuSO₄ in an aqueous solution of BTTAA. When Cu(II)-BTTAA is treated with reducing agents, such as [ascorbic acid](#), a catalytically active complex with monovalent copper(I) is formed.

BTTAA maintains the catalyst's oxidation state of Cu(I) and protects biomolecules from oxidative damage during labeling. BTTAA also significantly reduces the click reaction's cellular cytotoxicity by reducing the copper content in the catalyst.

General properties

Appearance: light blue solution

Solubility: good in water

Quality control: NMR ¹H and HPLC-MS (95+%)

Storage conditions: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

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