

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 coppercatalyzed click reaction (CuAAC) in an aqueous medium. This complex is stable and contains divalent copper in the form of 10 mM $CuSO_4$ in an aqueous solution of BTTAA. When Cu(II)-BTTAA is treated with reducing agents, such as <u>ascorbic acid</u>, 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 | |
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| Appearance: | light blue solution |
| Solubility: | good in water |
| Quality control: | NMR ¹ H and HPLC-MS (95+%) |
| Storage conditions | : 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. |
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