

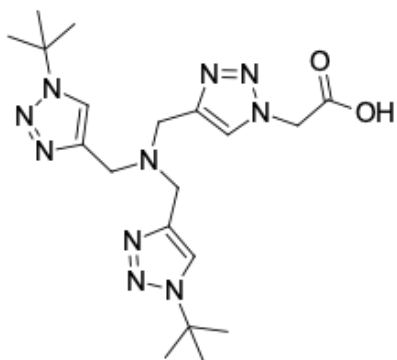
BTTAA ligand

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

BTTAA is the newest generation of water-soluble ligands for Cu(I)-catalyzed azide-alkyne click chemistry reactions (CuAAC). It maintains the Cu(I) oxidation state in the catalyst and protects biomolecules from oxidative damage during the labeling.

BTTAA provides much more significant rate enhancement than previous generation ligands (e.g., [THPTA](#) or [TBTA](#)) and suppresses cell cytotoxicity by further lowering copper loading in the catalyst formulation.

A stock solution can be prepared in ddH₂O and stored at -20°C. Avoid freeze-thaw cycles.



Structure of BTTAA ligand

General properties

| | |
|---------------------|---|
| Appearance: | off-white to grey solid |
| Molecular weight: | 430.52 |
| CAS number: | 1334179-85-9 |
| Molecular formula: | C ₁₉ H ₃₀ N ₁₀ O ₂ |
| IUPAC name: | 2-(4-((bis((1-(tert-butyl)-1H-1,2,3-triazol-4-yl)methyl)amino)methyl)-1H-1,2,3-triazol-1-yl)acetic acid |
| Solubility: | Soluble in water, DMSO, DMF, MeOH |
| Quality control: | NMR ¹ H 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. |