

**Na-Ascorbate - click chemistry grade**

L-Ascorbic acid sodium salt

Cat. No.	Amount
CLK-MI005-1G	5 x 200 mg

**For research use only!****Shipping:** shipped at ambient temperature**Storage Conditions:** store at ambient temperature**Additional Storage Conditions:** store dry**Shelf Life:** 12 months after date of delivery**Molecular Formula:** C<sub>6</sub>H<sub>7</sub>NaO<sub>6</sub>**Molecular Weight:** 198.11 g/mol**CAS#:** 134-03-2**Purity:** ≥ 98 % (TLC)**Form:** solid**Color:** white to off-white**Solubility:** water**Description:**

Na-Ascorbate can be used as a reduction reagent for Cu(I)-catalyzed Alkyne-Azide click chemistry reactions (CuAAC).

It catalyzes the reduction of Cu(II) sources such as CuSO<sub>4</sub> thereby releasing catalytically reactive Cu(I) ions.

Ideally, solutions should be freshly prepared in ddH<sub>2</sub>O shortly before use. Alternatively, a stock solution can be prepared, stored at -20°C and freshly by diluted shortly before use.

*Please note: Do not use solutions that appear brown. Freshly prepared, fully functional Na-Ascorbate solutions are colorless and turn brown upon oxidization thereby losing their reduction capability.*

Presolski *et al.*<sup>[1]</sup> and Hong *et al.*<sup>[2]</sup> provide a general protocol for CuAAC reactions that may be used as a starting point for the set up and optimization of individual assays.

**Related Products:**Copper (II)-Sulphate (CuSO<sub>4</sub>), #CLK-MI004

THPTA, #CLK-1010

BTAA, #CLK-067

**Selected References:**

[1] Presolski *et al.* (2011) Copper-Catalyzed Azide-Alkyne Click Chemistry for Bioconjugation. *Current Protocols in Chemical Biology* 3:153.

[2] Hong *et al.* (2011) Analysis and Optimization of Copper-Catalyzed Azide-Alkyne Cycloaddition for Bioconjugation. *Angew. Chem. Int. Ed.* 48:9879.