

**Na-Ascorbate - click chemistry grade**

L-Ascorbic acid sodium salt

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

For general laboratory use.**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:** C₆H₇NaO₆**Molecular Weight:** 198.11 g/mol**CAS#:** 134-03-2**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 CuSO₄ thereby releasing catalytically reactive Cu(I) ions.

Ideally, solutions should be freshly prepared in ddH₂O 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 to slightly yellow and turn brown upon oxidization thereby losing their reduction capability.

Presolski *et al.*^[1] and Hong *et al.*^[2] 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 (CuSO₄), #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.