DATA SHEET

Jena Bioscience

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: $C_6H_7NaO_6$

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 $CuSO_4$ thereby releasing catalytically reactive Cu(I) ions.

Ideally, solutions should be freshly prepared in ddH_2O 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 loosing 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 ($CuSO_4$), #CLK-MI004
THPTA, #CLK-1010
BTTAA, #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.