

FastClick™ Click Reaction Buffer

 Catalog number: 72601
 Unit size: 50 mL

Component	Storage	Amount (Cat No. 72601)
Component A: Click Reaction Mix (2X)	Refrigerated (2-8 °C)	1 Bottle (50 mL)
Component B: Click Reaction Additive	Refrigerated (2-8 °C)	5 Vials (80 mg/vial)

OVERVIEW

The FastClick™ Click Reaction Buffer Kit is a market-first solution for chemists seeking a fast, reproducible, and scalable method for copper-catalyzed azide-alkyne cycloaddition (CuAAC) in synthetic systems. This kit includes two components that enable straightforward setup and highly efficient click reactions.

CuAAC is widely recognized as a reliable and orthogonal ligation method for generating complex molecules, attaching tags, and linking functional groups. The FastClick™ buffer system facilitates this process by delivering robust performance across a range of commonly used organic and aqueous solvents, substrates, and surfaces. With a convenient mix-and-use format and 50 mL pack size, this kit is well-suited for both bench-scale reactions and larger preparative work in chemical synthesis, materials science, drug development, and surface functionalization.

3. Add 5 µL of 20X Click Reaction Additive stock solution to start the reaction.
4. Incubate samples for 20-30 minutes at room temperature (protected from light).
5. Alkyne-functionalized biomolecules and azide-functionalized biomolecules are now click-labeled and ready for downstream processes.

Note: The volume of the click reaction can be scaled-up proportionally.

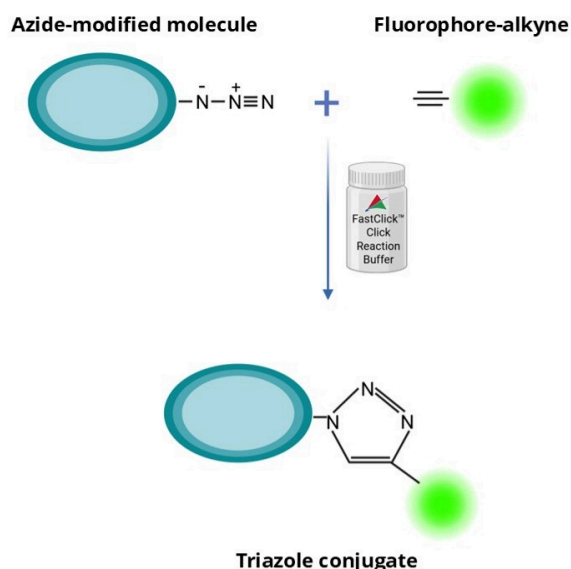
EXAMPLE DATA ANALYSIS AND FIGURES


Figure 1. Overview of the FastClick™ Click Reaction workflow. Azide- or alkyne-modified biomolecules undergo rapid click reaction in the presence of the FastClick™ reaction buffer (cat. #72601) enabling efficient bioconjugation with minimal background.

DISCLAIMER

AAT Bioquest provides high-quality reagents and materials for research use only. For proper handling of potentially hazardous chemicals, please consult the Safety Data Sheet (SDS) provided for the product. Chemical analysis and/or reverse engineering of any kit or its components is strictly prohibited without written permission from AAT Bioquest. Please call 408-733-1055 or email info@aatbio.com if you have any questions.

AT A GLANCE

1. Prepare 50 µL azide- and alkyne- functionalized molecules solution mix.
2. Add 50 µL 2X Click Reaction Mix, and mix briefly.
3. Add 5 µL 20X Click Reaction Additive stock solution to start the reaction.
4. Incubate samples for 20-30 min at room temperature (protected from light).
5. Alkyne-functionalized biomolecules and azide-functionalized biomolecules are now click-labeled and ready for downstream process.

PREPARATION OF STOCK SOLUTIONS

Unless otherwise noted, all unused stock solutions should be divided into single-use aliquots and stored at -20 °C after preparation. Avoid repeated freeze-thaw cycles

20X Click Reaction Additive Stock Solution:

Add 1 mL of water to one vial of Click Reaction Additive (Component B) to make a 20X additive stock solution.

Note 1: The 20X Click Reaction Additive stock solution is oxidized easily, use it promptly. Prepare single use aliquots, and store at -20 °C. Avoid repeated freeze-thaw-cycles.

Note 2: Do not use solutions that appears dark brown. Freshly prepared 20X Click Reaction Additive stock solution is colorless to slightly yellow. It loses its reduction capability when it turns dark brown upon oxidation.

SAMPLE EXPERIMENTAL PROTOCOL

1. Prepare 50 µL azide- and alkyne- functionalized molecules solution mix in PBS or appropriate buffer.
2. Add 50 µL of 2X Click Reaction Mix (Component A), and mix briefly.