

FastClick™ Click Reaction Buffer Kit

 Catalog number: 72600
 Unit size: 50 Tests

Component	Storage	Amount (Cat No. 72600)
Component A: Click Reaction Mix (2X)	Refrigerated (2-8 °C)	2 vials (1.5 mL/vial)
Component B: Click Reaction Additive	Refrigerated (2-8 °C)	2 vials (10 mg/vial)

OVERVIEW

The FastClick™ Click Reaction Buffer Kit is a market-first solution for a convenient copper-catalyzed azide-alkyne cycloaddition (CuAAC) in biological systems. This kit features two components in a mix-and-use format that enables rapid and specific bioconjugation under mild conditions.

The CuAAC click reaction is a gold-standard bioorthogonal coupling method, offering exceptional specificity due to the low natural abundance of azide and alkyne groups in biological systems. This kit is designed for biological research applications, making it ideal for supporting high-efficiency bioconjugation workflows such as protein labeling, nucleic acid modification, and molecular tagging. The reaction is quick and produces reliable, high-yield results with minimal background interference. With its simple protocol and robust performance, the FastClick™ buffer kit is well-suited for cell biology, proteomics, and biochemical studies involving click chemistry in complex biological samples.

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 125 µL 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.

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.

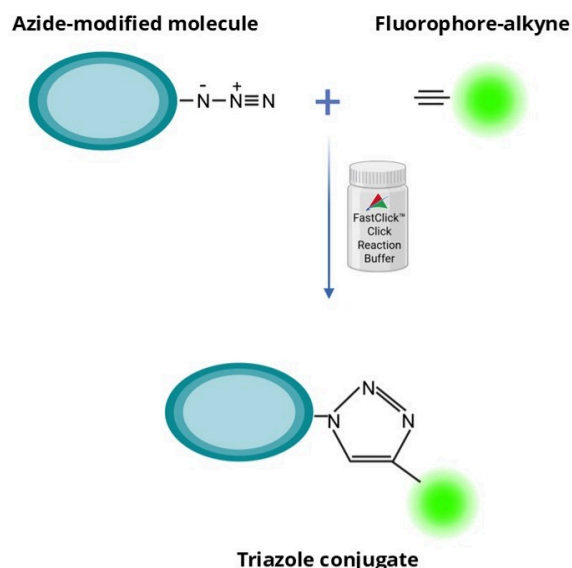
EXAMPLE DATA ANALYSIS AND FIGURES


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. #72600) enabling efficient bioconjugation with minimal background.

DISCLAIMER

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