CYCLOADDITIONS IN BIOLOGICAL SYSTEMS PROMOTED BY STRAINED PI-BONDS

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ABSTRACT

The present invention provides modified cycloalkyne compounds; and method of use of such compounds in modifying biomolecules. The present invention features a cycloaddition reaction that can be carried out under physiological conditions. In general, the invention involves reacting a modified cycloalkyne with an azide moiety on a target biomolecule, generating a covalently modified biomolecule. The selectivity of the reaction and its compatibility with aqueous environments provide for its application in vivo (e.g., on the cell surface or intracellularly) and in vitro (e.g., synthesis of peptides and other polymers, production of modified (e.g., labeled) amino acids).

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	12,048,710	07/30/2024	2005-033
United States Of America	Issued Patent	11,278,554	03/22/2022	2005-033
United States Of America	Issued Patent	10,434,111	10/08/2019	2005-033
United States Of America	Issued Patent	9,260,371	02/16/2016	2005-033
United States Of America	Issued Patent	8,461,298	06/11/2013	2005-033
United States Of America	Issued Patent	8,431,558	04/30/2013	2005-033
United States Of America	Issued Patent	7,807,619	10/05/2010	2005-033

Additional Patent Pending

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OTHER INFORMATION

KEYWORDS

Copper-free, click chemistry

CATEGORIZED AS

» **Materials & Chemicals**

» Chemicals

» **Research Tools**

» Reagents

RELATED CASES

2005-033-0