第82回HiHA Seminar

主催: 広島大学健康長寿研究拠点 Hiroshima Research Center for Healthy Ageing (HiHA)

HIROSHIMA UNIVERSITY

Generating bioactive compounds via click-type reaction between thioamides and sulfonyl azides: Study in gluconoamidine and piperine derivatives

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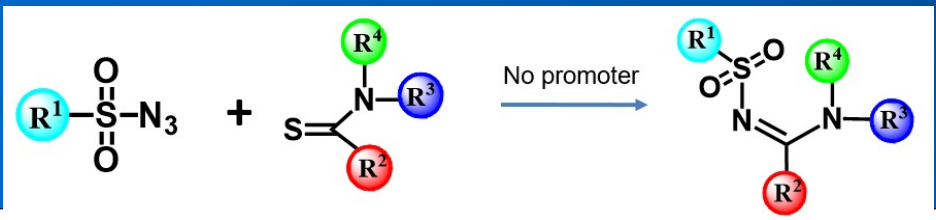
Many click-type reactions have been created and used in biological conditions, although in most cases, the ligations require additives or catalysts to be used practically. It has been observed that thioamides and sulfonyl azides can react chemoselectively to produce sulfonyl amidines without the need for activation additives. The thioamide and sulfonyl azide were mixed at room temperature in various solvents to continue the reaction, and water performed the best in terms of efficiency. Because amidines have polar and hydrophilic properties within the product framework, we used this reaction to derivatize sugars like nojirimycin and create new glucosidase inhibitors that will be promising antidiabetic agents. On the other research, piperine, a natural product derived from pepper, was modified by the reaction and produced some derivatives that inhibit the NF-κB activation on 4T1 breast cancer cells.

Muhammad Aswad博士は、本学が大学間交流協定を締結しているインドネシア・ハサヌディン大学の新進気鋭の研究者です。チオアミドとスルホンアミドのclick様反応による生理活性物質の創成研究を手がけており、今回のご講演では機能性医薬品創成への適応に視点を置いた内容をお願いしてあります。1ヶ月の日本滞在中に来学していただき、最新の研究をご講演して頂くことになりました。教員・院生・学部生を問わず多数のご来聴をお待ちしております。



開催日時：令和 5 年 10月 23日(月) 15:00-16:00

会場：広島大学先端科学総合研究棟3階 302S会議室

お問い合わせ先

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