



第2回HiHA Seminar

主催: 広島大学健康

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 gluconoamide and piperine derivatives

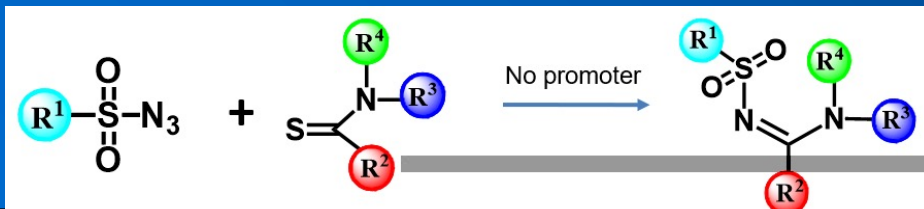
Associate Professor Muhammad Aswad
Hasanuddin University, Makassar, Indonesia

(Facilitator: Kenji Arakawa, Graduate School of Integrated Sciences for Life)

Many click-type reactions have been created and used in biological conditions, although in most cases, the reactions 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- κ B activation on 4T1 breast cancer cells.

M hammad A ad博士 本学 大学 交流協定

click様
機 性医
演 月 日本滞在
今 日 教員 生
手 内容 演
反 應 生 理 活 性 物 創 成 手 今 回 演 機 性 医
品 創 成 應 点 最新 来 待 演 月 日本滞在
中 来 学 多 数 来 待 演 教 員 生
学 生 問 多数 来 待 演 教 員 生



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

- 広島大学大学院統合生命科学研究科HiHA事務局(healthy-aging@hiroshima-u.ac.jp)
- 荒川 賢治 (karakawa@hiroshima-u.ac.jp)