

Condensing Agent Enabling Redox Active Ester (RAEs) Formation



2-(1,3-Dioxoisindolin-2-yl)-
1,1,3,3-tetramethylisouronium
Hexafluorophosphate (= PITU)

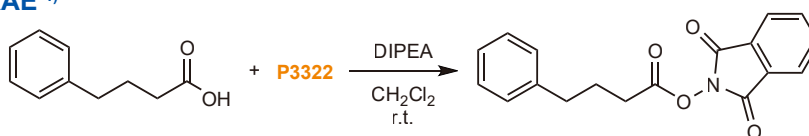
5g / 25g
[P3322]

Advantages

- Enables easy preparation of redox active esters (RAEs)
- Suitable for *in situ* decarboxylative cross coupling via electrochemical reactions ²⁾
- Available in large quantities to support bulk supply requirements

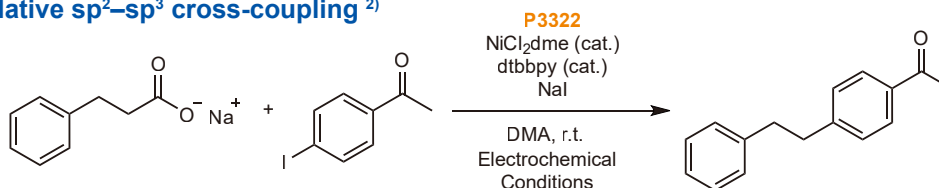
Applications

Preparation of RAE ¹⁾



Using DIPEA as a base makes it easy to form RAE.

Decarboxylative sp^2 - sp^3 cross-coupling ²⁾



The electrochemical cross-coupling reactions proceed via RAEs, which are generated *in situ* from sodium carboxylates as the starting materials.

References 1) J. Wang *et al.*, *Angew. Chem. Int. Ed.* **2019**, *58*, 12081. <https://doi.org/10.1002/anie.201906000>
2) T. Koyanagi *et al.*, *Org. Lett.* **2019**, *21*, 816. <https://doi.org/10.1021/acs.orglett.8b04090>

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Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 78 45 60
E-mail : Sales-UK@TCIchemicals.com

梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386
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Tel : 1800 425 7889 / 044-2262 0909
E-mail : Sales-IN@TCIchemicals.com

TOKYO CHEMICAL INDUSTRY CO., LTD.

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