Highly Active Visible Light Photoredox Organocatalyst

Acr-450

Advantages

• Maximum absorption occurs around 450 nm.
• More active than the conventional acridinium photoredox catalysts.
• Applicable to decarboxylations and halogenations via the photoredox reaction.
• Used in S_NAr type substitutions and C-H activation reactions.

Applications

Decarboxylation of photoredox reaction

D5983 (1 mol%) imidazole (1 eq.)
4-isopropylbenzenethiol (0.7 eq.)
CH2Cl2 / CH3OH
LED (447 nm), 1 h
FmocHN
Ph
H
CO2H
FmocHN
Ph
98% conversion

S_NAr type substitution of photoredox reaction

D5983 (5 mol%)
BzOH (3 eq.)
NaHCO3 (2 eq.)
2,2,2-trifluoroethanol
LED (447 nm), 20 h
F
OBz
CH3O
F
CH3O
51% NMR yield


Acr-450 is commercialized under the permission of Shionogi Pharma Co., Ltd. (WO2022107755).

Related Products

9-Mesityl-10-methylacridinium Perchlorate
4-Isopropylbenzenethiol

For further information please refer to our website at www.TCIchemicals.com.

Ordering and Customer Service

TCI EUROPE N.V.
Tel : +32 (0)3 735 07 00
Fax : +32 (0)3 735 07 01
E-mail : Sales-EU@TCIchemicals.com

TCI Deutschlands GmbH
Tel : +49 (0)6196 64053-00
Fax : +49 (0)6196 64053-01
E-mail : Sales-DE@TCIchemicals.com

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

TCI Chemicals (India) Pvt. Ltd.
Tel : 1800 425 7889 / 044-2262 0909
E-mail : Sales-IN@TCIchemicals.com

TOKYO CHEMICAL INDUSTRY CO., LTD.
Tel : +81 (0)3-5640-8878
E-mail : globalbusiness@TCIchemicals.com

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