

EvoluChem™ PhotoChemistry Kit



～光反応用装置～

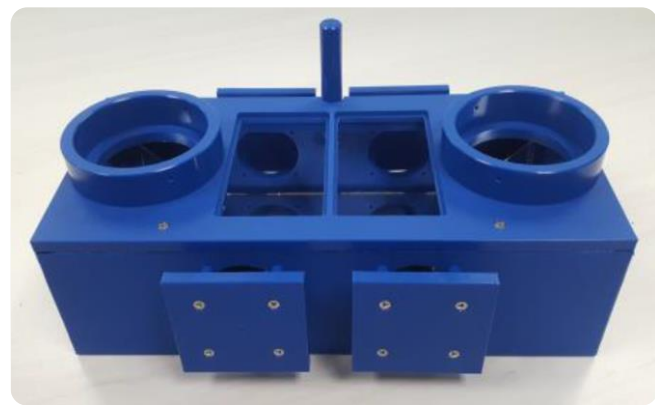
PhotoRedOx Duo

■大容量/高効率■

●同じバイアルホルダー2つを使用することで、反応バイアル（2,4または8ml）を16本に増加。

●2つの青色LEDを使用することで反応効率を高めることが可能。

●PhotoRedOx Boxと同じユニークなデザインを採用。



(HCK1006-01-022, 光源・バイアルホルダー別売り)

従来品(PhotoRedOx Box, HCK1006-01-016)との比較テスト

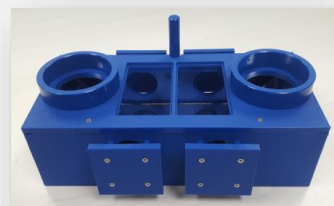
PhotoRedOx Box



反応効率を向上
→時間節約に！



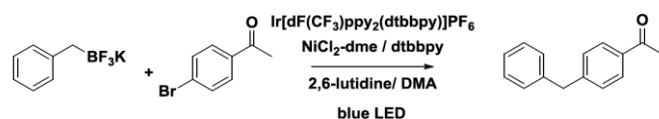
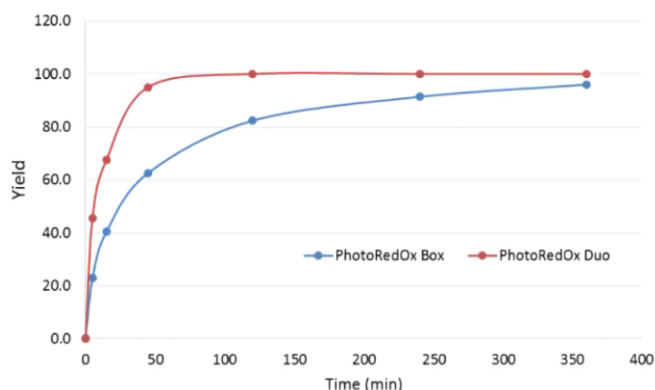
PhotoRedOx Duo



96 % yield, 360 min



95% yield, 45 min



光源 : blue Kessil 34W LED , バイアルサイズ : 4 ml



EvoluChem™ LED のご紹介

光反応に最適なLEDライト
数種類の波長から選択可能
従来のLEDライトより高効率



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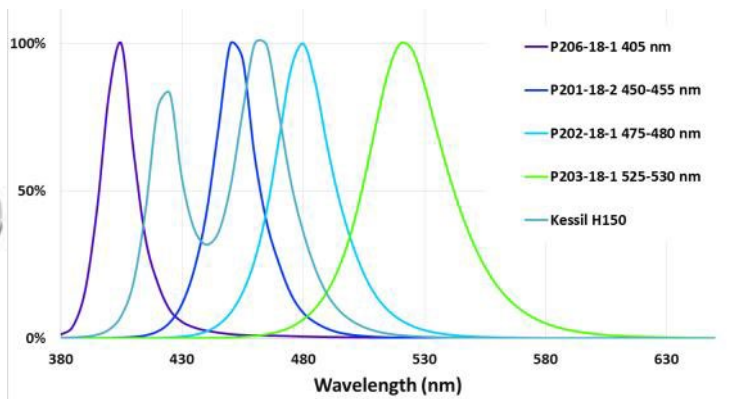
EvoluChem™ LED 18W

General Specifications

Power Consumption	18W Max
Input Voltage	100-240 VAC
Beam Angle	25°
Wavelength Options	365 nm, 405 nm, 455 nm, 475 nm, 525 nm, 6200K white
LED	Cree XPE, Cree XTE and LG (9X)



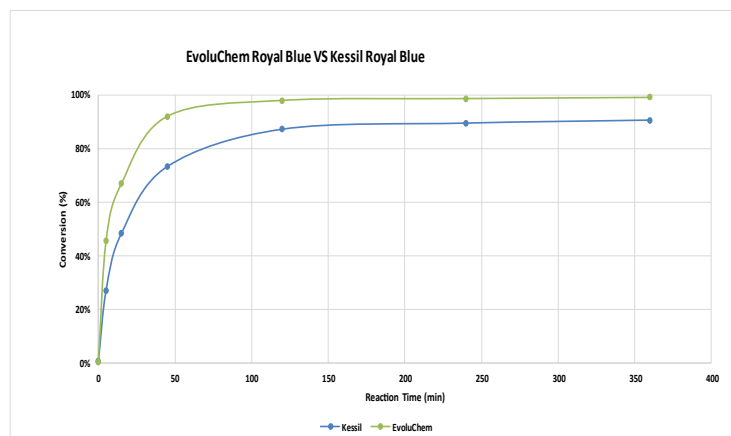
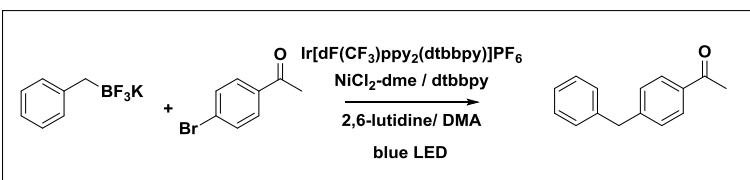
Light Spectrum



EvoluChem vs Kessil

Experimental Details:

In duplicate in a 4-ml vial equipped with a teflon septa and 2x7 mm stir bar, were weighed 4-bromoacetophenone (4.95 mg, 25 μ mol) and potassium benzyltrifluoroborate (4.50 mg, 25 μ mol, 1 equiv.). To this vial was added a 1.0 ml solution in DMA containing $\text{NiCl}_2\text{-dme}$ (1.1 mg, 5 μ mol, 0.1 mol %), dtbbpy (1.3 mg, 5 μ mol, 0.1 mol %) and $\text{Ir}(\text{dF-CF}_3\text{-ppy})_2$ (dtbbpy) (1.12 mg, 1 μ mol, 0.02 mol %) followed by addition of 2,6-lutidine (17.5 μ l, 150 μ mol, 6 equiv.). The solution was sparged with nitrogen via submerged needle for 5 minutes and vial was placed in EvoluChem photoreactor with blue Kessil 34W LED or with a EvoluChem Royal Blue LED 18W. Reaction time course was monitored at 0, 5, 15, 45, 120, 240, and 360 minutes.



	P205-18-1	P206-18-1	P201-18-2	P202-18-1	P203-18-1	P204-18-1
	365 nm	405 nm	450-455 nm	475-480 nm	525-530 nm	6200K
LED	LG	LG	CREE XPE	CREE XPE	CREE XPE	CREE XTE
Wavelength	365 nm	405 nm	450-455 nm	475-480 nm	525-530 nm	Cold White 6200K
Part Number	HCK1012-01-011	HCK1012-01-010	HCK1012-01-002	HCK1012-01-003	HCK1012-01-004	HCK1012-01-005

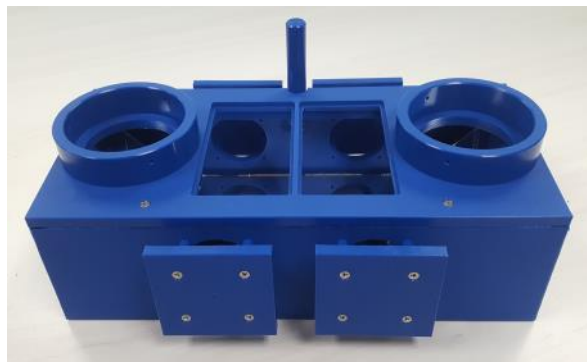
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EvoluChem™ PhotoRedOx Duo

The EvoluChem™ PhotoRedOx Duo is using the same unique design as the PhotoRedOx Box. PhotoRedOx Duo increases the reaction vials capacity to 16 vials (2, 4 or 8 ml) using 2 of the same vial holders as the PhotoRedOx box. Using the 2 blue LED setup allows to increase reaction rate of difficult reaction conditions.

PhotoRedOx Duo



PhotoRedOx Duo 2 Holders

2X Vials

2X Light power

Test Reaction

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