## Strem Chemicals, Inc.

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Catalog # 77-0453 (2,2'-Bipyridine)bis[3,5-difluoro-2-[5-trifluoromethyl-2-pyridinyl-kN)phenyl-kC]iridium(III) hexafluorophosphate, 99%

## **Technical Notes:**

- 1. Catalyst used for the chemo-, regio, and stereoselective trifluoromethylation of styrene.
- 2. Photoredox catalyst used in cross-coupling: Ir/Ni dual catalysts for the synthesis of benzylic ethers.
- 3. Iridium complex used for catalytic olefin hydroamidation enabled by proton-coupled electron transfer.
- 4. Catalyst used for visible light photoredox cross-coupling of acyl chlorides with potassium alkoxymethyltrifluoroborates.
- 5. Iridium catalyst used in the photoredox/nickel dual catalytic cross-coupling of secondary alkyl β-trifluoroboratoketones and –esters with aryl bromides.
- 6. Photocatalyst used in the cross-coupling of trifluoroalkylboranes.

Ar 
$$\sim$$
 Ir complex (3 mol%)  $\sim$  Visible light  $\sim$  Tech. Note. (1)  $\sim$  S-CF<sub>3</sub>(dibenzothiophenium)+BF<sub>4</sub>-

Ir complex, 
$$(2.0 \text{mol}\%)$$
  
NiCl<sub>2</sub>(dme),  $(3 \text{ mol}\%)$   
dtbbpy  $(3 \text{ mol}\%)$   
 $0.6 \text{ mmol}$ 
 $0.5 \text{ mmole}$ 

Ir complex,  $(2.0 \text{mol}\%)$   
 $0.6 \text{ mmol}$ 
 $0.5 \text{ mmole}$ 

Ir complex,  $(2.0 \text{mol}\%)$ 
 $0.6 \text{ mol}\%$ 
 $0.5 \text{ mmole}$ 

BnO

Ref. (2)

Ref. (2)

## References:

- 1. J. Org. Chem., 2014, 79, 10434.
- 2. Org. Lett., 2015, 17, 3294.
- 3. J. Am. Chem. Soc., 2015, 137, 13495.
- 4. Org. Lett., 2016, 18, 732.
- 5, Org. Lett., 2016, 18, 2994.
- 6. Org. Lett., 2016, 18, 5760.