Strem Chemicals, Inc.

www.strem.com

Catalog # 77-0370

[5,5'Bis(trifluoromethyl)-2,2'-bipyridine-kN,kN]bis[3,5-difluoro-2-(5-(trifluoromethyl)-2-pyridinyl-kN)phenyl] iridium(III) hexafluorophosphate, 98%

$$CF_3$$
 N
 CF_3
 PF_6
 F_3C

Technical Notes:

- 1. Catalytic alkylation of remote C-H bonds enabled by proton-coupled electron transfer.
- 2. Intermolecular anti-Markovnikov hydroamination of unactivated alkenes with sulfonamides enabled by proton-coupled electron transfer.

PMP N
$$\frac{2 \text{ mol}\% 77\text{-}0370}{5 \text{ mol}\% \text{ NBu}_4\text{OP(O)(OBu)}_2}$$
 $\frac{2 \text{ mol}\% 77\text{-}0370}{5 \text{ mol}\% \text{ NBu}_4\text{OP(O)(OBu)}_2}$ $\frac{5 \text{ mol}\% \text{ NBu}_4\text{OP(O)(OBu)}_2}{2.0 \text{ equiv. methyl vinyl ketone}}$ $\frac{6 \text{ mol}\% \text{ NBu}_4\text{OP(O)(OBu)}_2}{0.2 \text{ M PhCF}_3, \text{ blue LED's, RT}}$ $\frac{6 \text{ mol}\% \text{ NBu}_4\text{OP(O)(OBu)}_2}{\text{NMe}}$ $\frac{6 \text{ mol}\% \text{ NBu}_4\text{OP(O)(OBu)}_2}{$

References:

- 1. Nature. 2016, 539, 268.
- 2. J. Am. Chem. Soc., 2018, 140, 741.