## Supporting Information

# PALLADIUM- CATALYZED CASCADE REACTIONS OF 1-(3-ARYLPROP-2-YNYLOXY)-2BROMO BENZENE DERIVATIVES WITH ORGANOBORON COMPOUNDS 

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2-Bromo-1-(3-(4-methoxyphenyl)prop-2-ynyloxy)-4-methylbenzene (1a)




1-(4-(3-(2-Bromo-4-methylphenoxy)prop-1-ynyl)phenyl)ethanone (1b)


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2-Bromo-4-methyl-1-(3-phenylprop-2-ynyloxy)benzene) (1c)


3-Bromo-4-(3-(4-methoxyphenyl)prop-2-ynyloxy)biphenyl (1d)



1-(4-(3-(3-Bromobiphenyl-4-yloxy)prop-1-ynyl)phenyl)ethanone (1e)




3-Bromo-4-(3-phenylprop-2-ynyloxy)biphenyl (1f)


2-Bromo-4-fluoro-1-(3-(4-methoxyphenyl)prop-2-ynyloxy)benzene (1g)


1-(4-(3-(2-Bromo-4-fluorophenoxy)prop-1-ynyl)phenyl)ethanone (1h)


2-Bromo-4-fluoro-1-(3-phenylprop-2-ynyloxy)benzene (1i)



(Z)-3-((4-Methoxyphenyl)(phenyl)methylene)-5-methyl-2,3-dihydrobenzofuran (3a)


3-(bis(4-Methoxyphenyl)methylene)-5-methyl-2,3-dihydrobenzofuran (3b)


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(Z)-Methyl 4-((4-methoxypheny))(5-methylbenzofuran-3(2H)-ylidene)methyl)benzoate (3c)


## (E)-Methyl 3-((4-methoxyphenyl)(5-methylbenzofuran-3(2H)-ylidene)methyl)benzoate (3d):


(E)-3-((4-Methoxyphenyl)(5-methylbenzofuran-3(2H)-ylidene)methyl)benzaldehyde (3e):



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(Z)-1-(4-((5-Methylbenzofuran-3(2H)-ylidene)(phenyl)methyl)phenyl)ethanone (3f)


( E)-1-(4-((4-Methoxyphenyl)(5-methylbenzofuran-3(2H)-ylidene)methyl)phenyl)ethanone (3g):

(E)-Methyl-4-((4-acetylphenyl)(5-methylbenzofuran-3(2H)-ylidene)methyl)benzoate (3h):



## ( E)-Methyl-3-((4-acetylphenyl)(5-methylbenzofuran-3(2H)-ylidene)methyl)benzoate (3i):



(E)-3-((4-Acetylphenyl)(5-methylbenzofuran-3(2H)-ylidene)methyl)benzaldehyde (3j)





3-(Diphenylmethylene)-5-methyl-2,3-dihydrobenzofuran (3k)



## (E)-3-((4-Methoxyphenyl)(phenyl)methylene)-5-methyl-2,3-dihydrobenzofuran (31)



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(E)-Methyl 3-((5-methylbenzofuran-3(2H)-ylidene)(phenyl)methyl)benzoate (3m)

(E)-Methyl 4-((5-fluorobenzofuran-3(2H)-ylidene)(phenyl)methyl)benzoate (3n)

(E)-Methyl 3-((5-fluorobenzofuran-3(2H)-ylidene)(phenyl)methyl)benzoate (30)


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## (E)-5-Fluoro-3-((4-methoxyphenyl)(phenyl)methylene)-2,3-dihydrobenzofuran (3p)




| 1 | 175.0 | 150.0 | 125.0 | 100.0 | 75.0 | 50.0 | 25.0 | ppm |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 200.0 | 17 |  |  |  |  |  |  |  |

(E)-Methyl 4-((4-acetylphenyl)(5-fluorobenzofuran-3(2H)-ylidene)methyl)benzoate (3q)

(Z)-1-(4-((5-Fluorobenzofuran-3(2H)-ylidene)(phenyl)methyl)phenyl)ethanone (3r)

(Z)-Methyl 4-((5-fluorobenzofuran-3(2H)-ylidene)(4-methoxyphenyl)methyl)benzoate (3s)



(Z)-5-Fluoro-3-((4-methoxyphenyl)(phenyl)methylene)-2,3-dihydrobenzofuran (3t)

（Z）－1－（4－（Phenyl（5－phenylbenzofuran－3（2H）－ylidene）methyl）phenyl）ethanone（3u）

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(E)-Methyl 4-((4-acetylphenyl)(5-phenylbenzofuran-3(2H)-ylidene)methyl)benzoate (3v)


3-(Diphenylmethylene)-5-phenyl-2,3-dihydrobenzofuran (3w)

(E)-Methyl 4-(phenyl(5-phenylbenzofuran-3(2H)-ylidene)methyl)benzoate (3x)

(Z)-Methyl 4-((4-methoxyphenyl)(5-phenylbenzofuran-3(2H)-ylidene)methyl)benzoate (3y)

(Z)-3-((4-Methoxyphenyl)(phenyl)methylene)-5-phenyl-2,3-dihydrobenzofuran (3z)

(E)-3-((4-Fluoro-3-methylphenyl)(4-methoxyphenyl)methylene)-5-phenyl-2,3-dihydrobenzofuran (5a)


## (E)-1-(4-((4-Fluoro-3-methylphenyl)(5-fluorobenzofuran-3(2H)ylidene)methyl)phenyl)ethanone (5b)


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## (E)-3-((4-Fluoro-3-methylphenyl)(phenyl)methylene)-5-phenyl-2,3-dihydrobenzofuran(5c)



## (E)-5-Fluoro-3-((4-fluoro-3-methylphenyl)(4-methoxyphenyl)methylene)-2,3-dihydrobenzofuran (5d)


( $\boldsymbol{E}$ )-1-(4-((4-Fluoro-3-methylphenyl)(5-phenylbenzofuran-3(2H)ylidene)methyl)phenyl)ethanone (5e)


1-(4-(1E,2E)-1-(5-Methylbenzofuran-3(2H)-ylidene)-3-phenylallyl)phenyl)ethanone (6)


## 3-((4-Methoxyphenyl)(phenyl)methyl)-5-methylbenzofuran (8a)



## 3-Benzhydryl-5-methylbenzofuran (8b)



## 1-(4-((5-Methylbenzofuran-3-yl)(phenyl)methyl)ethanone (8c)



Methyl－3－（（4－methoxyphenyl）（5－methylbenzofuran－3－yl）methyl）benzoate（8d）


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5－Fluoro－3－（（4－methoxyphenyl）（phenyl）methyl）benzofuran（8e）





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