CAS SciFinder

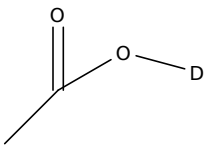
Task History

Initiating Search

February 21, 2025, 8:44 PM

Substances:

Filtered By:



Structure Match: **Substructure**

Search Tasks

Task	Search Type	View
Returned Substance Results + Filters (2,557)	Substances	View Results
Exported: Retrieved Related Reaction Results + Filters (56) Filtered By: Substance Role: **Reactant, Reagent, Solvent**	Reactions	View Results

Catalyst:	Bis(acetato-κ*O*)[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]iridium, Di-μ-chlorobis[(1,2,5,6-η)-1,5-cyclooctadiene]diiridium, *fac*-Tris(2-(2-pyridinyl)phenyl)iridium, Iridium(1+), [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,κ$N^{1'}$]bis[2-(2-pyridinyl-κ*N*)phenyl-κ*C*]-, (*OC*-6-33)-, hexafluorophosphate(1-) (1:1), Iridium(1+), [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,κ$N^{1'}$]bis[3,5-difluoro-2-(5-methyl-2-pyridinyl-κ*N*)phenyl-κ*C*]-, (*OC*-6-33)-, hexafluorophosphate(1-) (1:1), Iridium(1+), [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,κ$N^{1'}$]bis[3,5-difluoro-2-[5-(trifluoromethyl)-2-pyridinyl-κ*N*]phenyl-κ*C*]-, (*OC*-6-33)-, hexafluorophosphate(1-) (1:1), Iridium(2+), [(1,2,5,6-η)-1,5-cyclooctadiene][1,1'-[(1*S*)-6,6'-dimethoxy[1,1'-biphenyl]-2,2'-diyl]bis[1,1-diphenylphosphine-κ*P*]]-, tetrakis[3,5-bis(trifluoromethyl)phenyl]borate(1-) (1:1), Iridium, [2-[4,4'-bis(1,1-dimethylethyl)[2,2'-bipyridin]-6-yl-κN^1,κ$N^{1'}$]phenyl-κ*C*](η^2-ethene)ethyl(2,2,2-trifluoroacetato-κ*O*)-, stereoisomer, Iridium(2+), triaqua[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]-, 1,1,1-trifluoromethanesulfonate (1:2), Iridium, [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,κ$N^{1'}$]methyl(6-phenyl[2,2'-bipyridin]-3-yl-κC^3,κ$N^{1'}$)(1,1,1-trifluoromethanesulfonato-κ*O*)-, (*OC*-6-45)-, Iridium, [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,κ$N^{1'}$]phenyl(6-phenyl[2,2'-bipyridin]-3-yl-κC^3,κ$N^{1'}$)(1,1,1-trifluoromethanesulfonato-κ*O*)-, (*OC*-6-45)-, Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, (*OC*-6-11)-Methylbis(2,4-pentanedionato-κO^2,κO^4)(pyridine)iridium, (*OC*-6-14)-Bis(acetato-κ*O*)aqua[2,6-bis(4,5-dihydro-4,4-dimethyl-2-oxazolyl-κN^3)-3,5-dimethylphenyl-κ*C*]iridium, Tris[2-(2-pyridinyl-κ*N*)phenyl-κ*C*]iridium
Document Type:	Journal
Language:	English

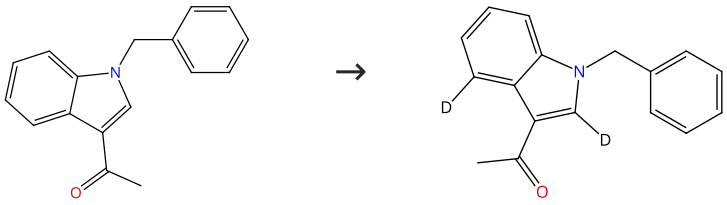
CAS SciFinder

Reactions (29)

View in CAS SciFinder

Scheme 1 (1 Reaction)

Steps: **1** Yield: **95%**



Suppliers (29)

31-614-CAS-23953766

Steps: **1** Yield: **95%**

1.1 **Reagents:** Potassium acetate, Silver carbonate, Silver acetate, Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, [1,1,1-Trifluoro-*N*-[(trifluoromethyl)sulfonyl-κ*O*]methanesulfonamidato-κ*O*] silver
Solvents: *tert*-Butyl methyl ether; 1 h, 100 °C

Experimental Protocols

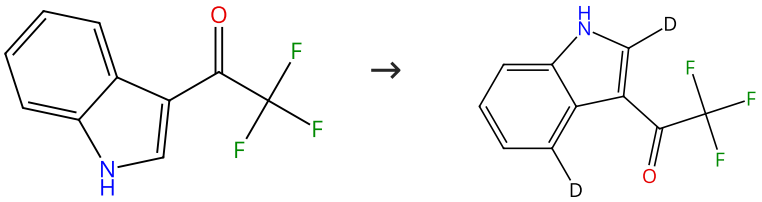
Cascade Reaction to Selectively Synthesize Multifunctional Indole Derivatives by Ir^{III}-Catalyzed C-H Activation

By: Chai, Xin-Yue; et al

Chemistry - A European Journal (2021), 27(52), 13123-13127.

Scheme 2 (1 Reaction)

Steps: **1** Yield: **94%**



Suppliers (67)

31-116-CAS-16998779

Steps: **1** Yield: **94%**

1.1 **Reagents:** Lithium carbonate (Li_2CO_3), Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, [1,1,1-Trifluoro-*N*-[(trifluoromethyl)sulfonyl-κ*O*]methanesulfonamidato-κ*O*] silver
Solvents: 1,2-Dichloroethane; 6 h, 60 °C

Experimental Protocols

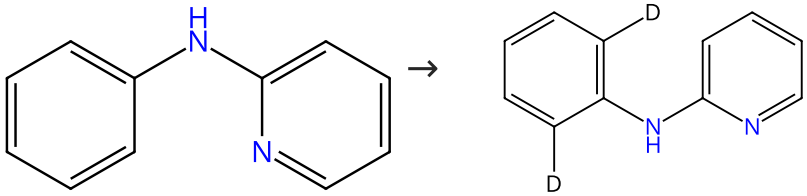
Iridium(III) catalyzed regioselective amidation of indoles at the C4-position using weak coordinating groups

By: Lanke, Veeranjaneyulu; et al

Chemical Communications (Cambridge, United Kingdom) (2017), 53(37), 5117-5120.

Scheme 3 (1 Reaction)

Steps: **1** Yield: **92%**



Suppliers (73)

31-116-CAS-22807075 Steps: **1** Yield: **92%**

1.1 **Reagents:** Acetic acid-d_4, Sodium fluoride
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-
Solvents: Methanol; 12 h, 90 °C

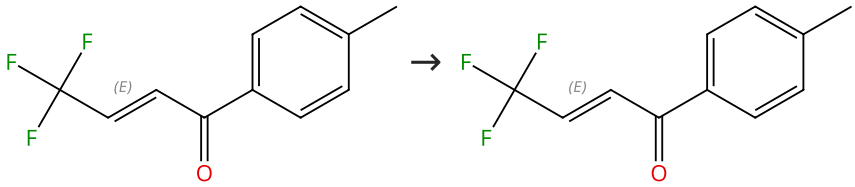
Experimental Protocols

Iridium(III)-Catalyzed Tandem Annulation of Pyridine-Substituted Anilines and α-Cl Ketones for Obtaining 2-Arylindoles

By: Cui, Xin-Feng; et al

Journal of Organic Chemistry (2020), 85(21), 13517-13528.

Scheme 4 (1 Reaction) Steps: **1** Yield: **90%**



Double bond geometry shown

Double bond geometry shown

Suppliers (2)

31-614-CAS-39085645 Steps: **1** Yield: **90%**

1.1 **Reagents:** Silver carbonate, Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, Silver hexafluoroantimonate
Solvents: 1,1,1,3,3,3-Hexafluoro-2-propanol; 24 h, 100 °C

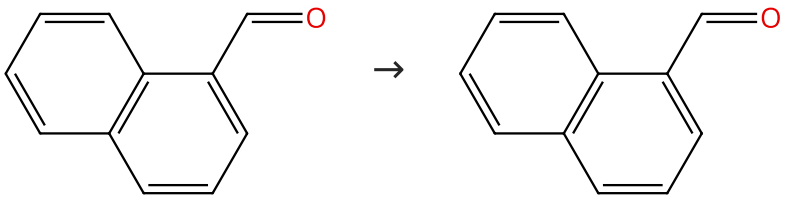
Experimental Protocols

Iridium(III)-catalyzed β-trifluoromethyl enone carbonyl-directed regioselective ortho-C(sp^2)-H olefination

By: Sindhe, Haritha; et al

Organic & Biomolecular Chemistry (2024), 22(6), 1162-1166.

Scheme 5 (1 Reaction) Steps: **1** Yield: **90%**



Suppliers (92)

31-614-CAS-31174274 Steps: **1** Yield: **90%**

1.1 **Catalysts:** 3-Aminobenzenesulfonic acid, Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, [1,1,1-Trifluoro-*N*-[(trifluoromethyl)sulfonyl-κ*O*]methanesulfonamidato-κ*O*]silver
Solvents: Acetic acid-*d*; 5 min, 90 °C

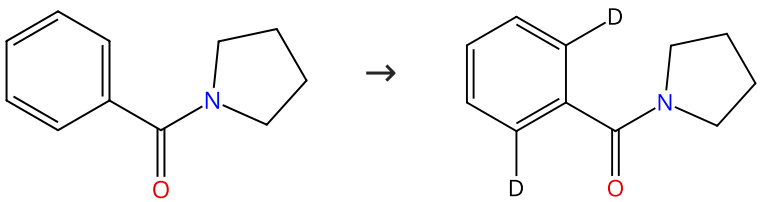
Experimental Protocols

Overcoming peri- and ortho-selectivity in C-H methylation of 1-naphthaldehydes by a tunable transient ligand strategy

By: Mao, Yujian; et al

Chemical Science (2022), 13(10), 2900-2908.

Scheme 6 (1 Reaction) Steps: **1** Yield: **89%**



Suppliers (43)

31-614-CAS-41850413 Steps: **1** Yield: **89%**

1.1 **Reagents:** Cupric acetate, Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, Silver hexafluoro antimonate
Solvents: Tetrahydrofuran; 12 h, 120 °C

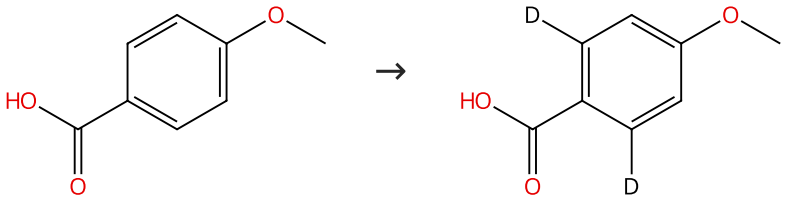
Experimental Protocols

Ir(III)-Catalyzed Tandem Annulation of Aromatic Amides with 1,6-Diynes via Dual C-H Bond Activation

By: Yadav, Suresh Kumar; et al

Organic Letters (2024), 26(37), 7809-7816.

Scheme 7 (1 Reaction) Steps: **1** Yield: **87%**



Suppliers (116) Supplier (1)

31-116-CAS-21022814 Steps: **1** Yield: **87%**

1.1 **Reagents:** Silver carbonate, Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-
Solvents: 1,2-Dichloroethane; 16 h, 80 °C

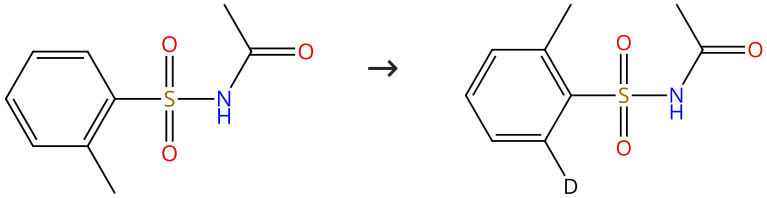
Experimental Protocols

Regioselective Synthesis of Isocoumarins via Iridium(III)-Catalyzed Oxidative Cyclization of Aromatic Acids with Propargyl Alcohols

By: Sihag, Pinki; et al

Journal of Organic Chemistry (2019), 84(5), 2699-2712.

Scheme 8 (1 Reaction) Steps: **1** Yield: **81%**



Suppliers (5)

31-116-CAS-20579031 Steps: **1** Yield: **81%**

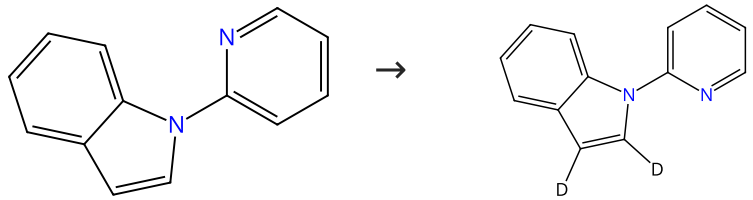
1.1 **Reagents:** Acetic acid-d, Water-d_2
Catalysts: Silver carbonate, Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-
Solvents: 1,2-Dichloroethane; 12 h, 80 °C

Iridium-Catalyzed ortho-C-H Amidation of Benzenesulfonamides with Sulfonyl Azides

By: Hou, Hongcen; et al

Advanced Synthesis & Catalysis (2019), 361(18), 4393-4398.

Scheme 9 (1 Reaction) Steps: **1** Yield: **72%**



Suppliers (36)

31-614-CAS-24398286 Steps: **1** Yield: **72%**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-
Solvents: Acetic acid-d_4; 6 h, 80 °C

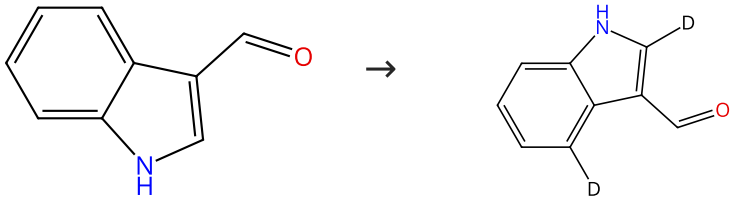
Experimental Protocols

Iridium-Catalyzed Redox-Neutral C2 and C3 Dual C-H Functionalization of Indoles with Nitrones toward 7H-Indolo[2,3-c]quinolines

By: Li, Miao; et al

Organic Letters (2021), 23(21), 8229-8234.

Scheme 10 (1 Reaction) Steps: **1** Yield: **70%**



Suppliers (123)

31-116-CAS-16998778 Steps: **1** Yield: **70%**

1.1 **Reagents:** Lithium carbonate (Li_2CO_3), Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, [1,1,1-Trifluoro-*N*-[(trifluoromethyl)sulfonyl-κ*O*]methanesulfonamidato-κ*O*]silver
Solvents: 1,2-Dichloroethane; 6 h, 60 °C

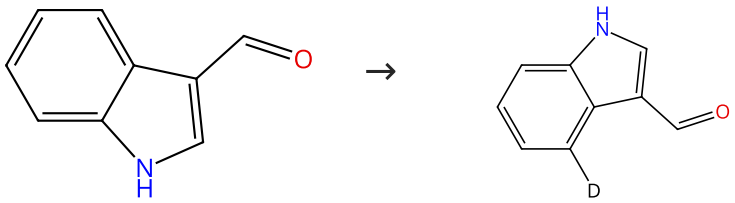
Experimental Protocols

Iridium(III) catalyzed regioselective amidation of indoles at the C4-position using weak coordinating groups

By: Lanke, Veeranjaneyulu; et al

Chemical Communications (Cambridge, United Kingdom) (2017), 53(37), 5117-5120.

Scheme 11 (1 Reaction) Steps: **1** Yield: **66%**



Suppliers (123)

31-116-CAS-17107870 Steps: **1** Yield: **66%**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Bis(acetato-κ*O*)[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]iridium, [1,1,1-Trifluoro-*N*-[(trifluoromethyl)sulfonyl-κ*O*]methanesulfonamidato-κ*O*]silver
Solvents: 1,2-Dichloroethane; 18 h, rt

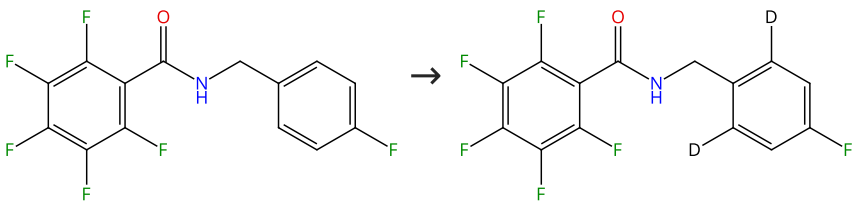
Experimental Protocols

Iridium-Catalyzed Direct Regioselective C4-Amidation of Indoles under Mild Conditions

By: Chen, Shuyou; et al

Organic Letters (2017), 19(10), 2502-2505.

Scheme 12 (1 Reaction) Steps: **1** Yield: **60%**



Supplier (1)

31-116-CAS-20983711 Steps: **1** Yield: **60%**

1.1 **Reagents:** Silver acetate, Acetic acid-*d*
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-
Solvents: 1,2-Dichlorobenzene; 6 h, 100 °C

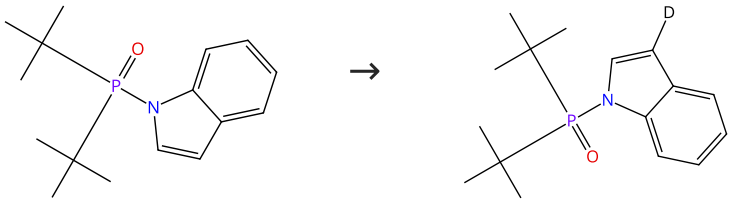
Experimental Protocols

Iridium-Catalyzed Benzylamine C-H Alkenylation Enabled by Pentafluorobenzoyl as the Directing Group

By: Yang, Xiao; et al

Organic Letters (2019), 21(4), 1002-1006.

Scheme 13 (1 Reaction) Steps: **1** Yield: **49%**



Suppliers (2)

31-614-CAS-33609673 Steps: **1** Yield: **49%**

1.1 **Reagents:** *tert*-Butyl hydroperoxide, 4-Methylbenzaldehyde, Acetic acid-*d*
Catalysts: Bis(benzonitrile)dichloropalladium, *N*-[(1,1-Dimethylethoxy)carbonyl]-2-methylalanine, *fac*-Tris(2-(2-pyridinyl)phenyl)iridium
Solvents: Ethyl acetate; 20 h, rt

Experimental Protocols

Palladium metallaphotoredox-catalyzed 3-acylation of indole derivatives

By: Wang, Xinmou; et al

Chemical Communications (Cambridge, United Kingdom) (2022), 58(68), 9492-9495.

Scheme 14 (1 Reaction) Steps: **1** Yield: **40%**

Suppliers (3)

31-116-CAS-17073624 Steps: **1** Yield: **40%**

1.1 **Reagents:** Acetic acid-*d*
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-
Solvents: 2-Methyl-2-butanol; 24 h, 30 °C

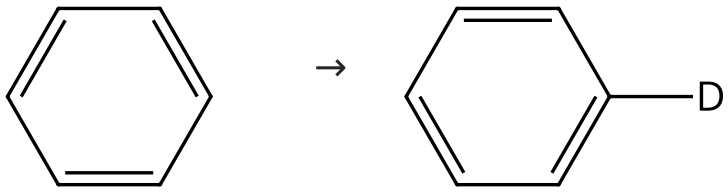
Experimental Protocols

Iridium-Catalyzed, Weakly Coordination-Assisted Ortho-Alkynylation of (Hetero)aromatic Carboxylic Acids without Cyclization

By: Chen, Changpeng; et al

Organic Letters (2017), 19(10), 2474-2477.

Scheme 15 (1 Reaction) Steps: **1** Yield: **11%**



Suppliers (179)

Suppliers (23)

31-116-CAS-8826514 Steps: **1** Yield: **11%**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Iridium, [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,κ$N^{1'}$]methyl(6-phenyl[2,2'-bipyridin]-3-yl-κC^3,κ$N^{1'}$)(1,1,1-trifluoromethanesulfonato-κO)-, (*OC*-6-45)-
Solvents: Benzene; 4 h, 170 °C

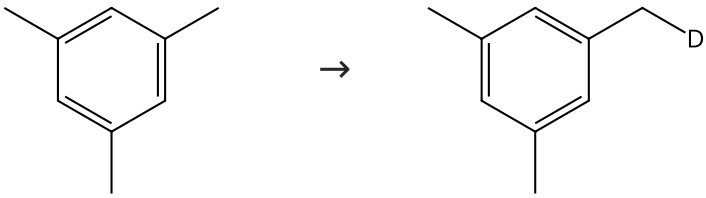
Experimental Protocols

Cyclometalation of 6-Phenyl-2,2'-Bipyridine and Iridium: Synthesis, Characterization, and Reactivity Studies

By: Young, Kenneth J. H.; et al

Organometallics (2009), 28(12), 3395-3406.

Scheme 16 (1 Reaction) Steps: **1**



Suppliers (93)

31-116-CAS-4111309 Steps: **1**

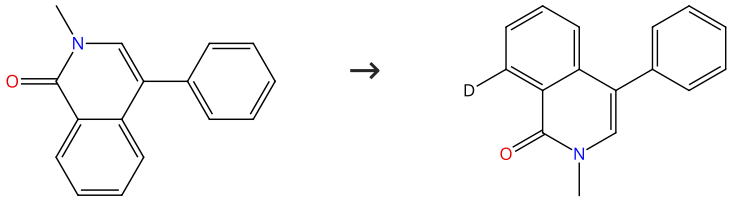
1.1 **Reagents:** Trifluoroacetic acid-*d*
Catalysts: (*OC*-6-11)-Methylbis(2,4-pentanedionato-κO^2,κO^4)(pyridine)iridium
Solvents: Trifluoroacetic acid-*d*; 160 °C

Alkane C-H bond activation by O-donor Ir complexes

By: Bhalla, Gaurav; et al

ACS Symposium Series (2004), 885, 105-115.

Scheme 17 (1 Reaction) Steps: **1**



Suppliers (12)

31-116-CAS-11762673 Steps: **1**

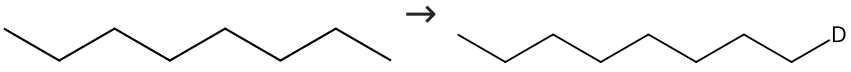
1.1 **Catalysts:** Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, Silver hexafluoro antimonate
Solvents: Acetic acid-*d*; 10 min, 100 °C

Catalyst Controlled Divergent C4/C8 Site-Selective C-H Arylation of Isoquinolones

By: Lee, Soyoung; et al

Organic Letters (2015), 17(15), 3864-3867.

Scheme 18 (1 Reaction) Steps: **1**



Suppliers (111)

31-116-CAS-6115793 Steps: 1

1.1 **Reagents:** Acetic acid-d_4
Catalysts: (*OC*-6-14)-Bis(acetato-κ*O*)aqua[2,6-bis(4,5-dihydro-4,4-dimethyl-2-oxazolyl-κN^3)-3,5-dimethylphenyl-κ*C*]iridium; 48 h, 160 °C

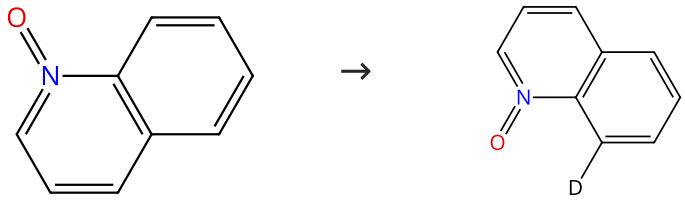
Experimental Protocols

Alkane Dehydrogenation by C-H Activation at Iridium(III)

By: Allen, Kate E.; et al

Organometallics (2013), 32(6), 1579-1582.

Scheme 19 (1 Reaction) Steps: **1**



Suppliers (57) Supplier (1)

31-614-CAS-38293578 Steps: 1

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, Silver hexafluoroantimonate, Shikimate-3-phosphate
Solvents: 1,2-Dichloroethane; 36 h, 110 °C

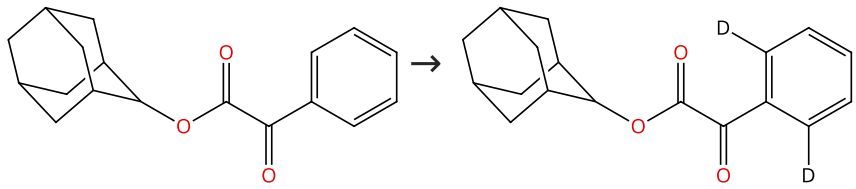
Experimental Protocols

Cp*Ir^{III}-Catalyzed C_8-Selective C-H Activation Enables Room-Temperature Direct Arylation of Quinoline N-Oxides with Arylsilanes

By: Tian, Hua; et al

Journal of Organic Chemistry (2023), 88(23), 16365-16375.

Scheme 20 (1 Reaction) Steps: **1**



31-614-CAS-35895681 Steps: 1

1.1 **Reagents:** 2-Fluoro-5-(trifluoromethyl)aniline, Trifluoroacetic acid-*d*
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, [1,1,1-Trifluoro-*N*-[(trifluoromethyl)sulfonyl-κ*O*]methanesulfonamidato-κ*O*] silver
Solvents: 1,2-Dichloroethane; 24 h, 80 °C

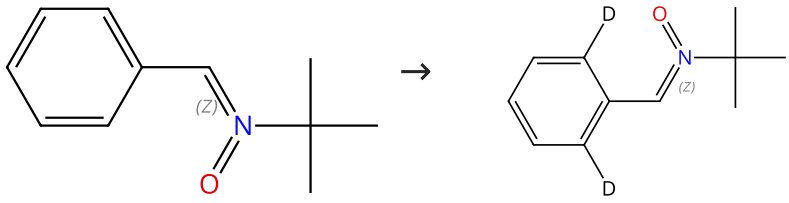
Experimental Protocols

Iridium-Catalyzed Direct Ortho-C-H Amidation of α-Ketoesters with Sulfonyl Azides Using a Transient Directing Group Strategy

By: He, Yinlong; et al

Journal of Organic Chemistry (2023), 88(7), 4345-4351.

Scheme 21 (1 Reaction) Steps: **1**



Double bond geometry shown Double bond geometry shown

Suppliers (17)

31-116-CAS-19997825 Steps: **1**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, Silver hexafluoro antimonate
Solvents: 1,2-Dichloroethane; 5 min, 25 °C

Experimental Protocols

Iridium(III)-Catalyzed C-H Amidation of Nitrones with Dioxazolones

By: Mi, Xia; et al

Journal of Organic Chemistry (2019), 84(9), 5305-5312.

Scheme 22 (1 Reaction) Steps: **1**

Suppliers (179) Suppliers (143)

31-116-CAS-4808238 Steps: **1**

1.1 **Reagents:** Trifluoroacetic acid-*d*
Catalysts: Iridium(2+), triaqua[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]-, 1,1,1-trifluoromethanesulfonate (1:2)
Solvents: Trifluoroacetic acid-*d*; rt → 150 °C; 24 h, 150 °C; 150 °C → rt

Experimental Protocols

Effect of Ancillary Ligands and Solvents on H/D Exchange Reactions Catalyzed by Cp*Ir Complexes

By: Feng, Yuee; et al

Organometallics (2010), 29(13), 2857-2867.

Scheme 23 (1 Reaction) Steps: **1**

Suppliers (102)

31-116-CAS-20076674 Steps: **1**

1.1 **Reagents:** Acetic acid-d_4, Water-d_2
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-; 2 h, 80 °C

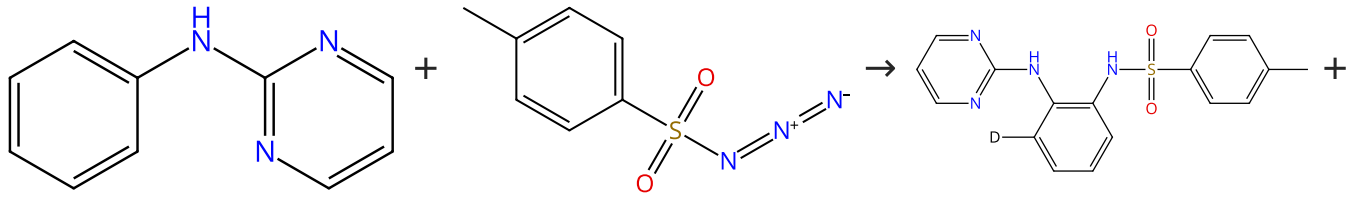
On-Water Cp*Ir(III)-Catalyzed C-H Functionalization for the Synthesis of Chromones through Annulation of Salicylaldehydes with Diazo-Ketones

By: Debbarma, Suvankar; et al

Journal of Organic Chemistry (2019), 84(10), 6207-6216.

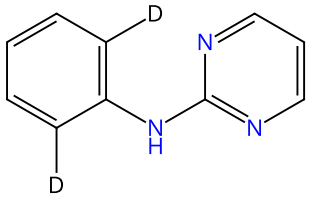
Scheme 24 (1 Reaction)

Steps: **1** Yield: **42%**



Suppliers (63)

Suppliers (45)



31-080-CAS-17811588

Steps: **1** Yield: **42%**

1.1 **Catalysts:** Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, Silver hexafluoro antimonate
Solvents: 1,2-Dichloroethane, Acetic acid-d_4; 12 h, 80 °C

Experimental Protocols

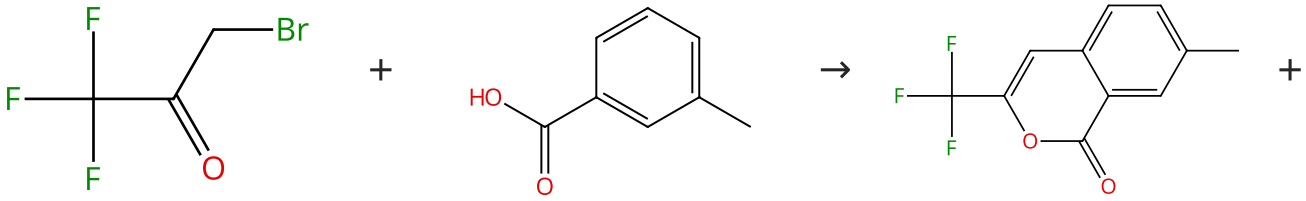
Iridium-catalyzed direct C-H amidation of anilines with sulfonyl azides: easy access to 1,2-diaminobenzenes

By: Wang, Lianhui; et al

Organic & Biomolecular Chemistry (2017), 15(39), 8302-8307.

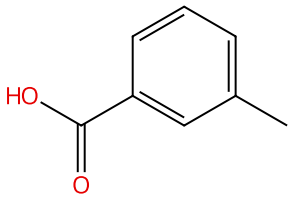
Scheme 25 (1 Reaction)

Steps: **1** Yield: **25%**



Suppliers (81)

Suppliers (92)



31-614-CAS-29342283

Steps: **1** Yield: **25%**

1.1 **Reagents:** Silver acetate, Acetic acid-*d*, Dipotassium phosphate
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, (±)-1,1'-Binaphthyl-2,2'-diyl hydrogen phosphate, X-Phos
Solvents: 2,2,2-Trifluoroethanol; 2 h, 140 °C

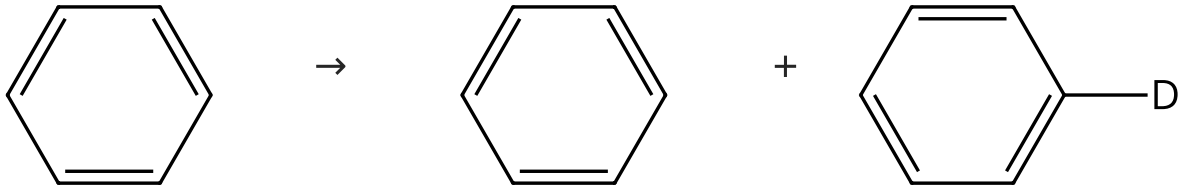
An Indirect Strategy for Trifluoromethylation via an Iridium Catalyst: Approach to Generate Isocoumarin Skeletons in Bioactive Molecules

By: Zhou, Kehan; et al

Organic Letters (2020), 22(13), 5109-5114.

Scheme 26 (1 Reaction)

Steps: **1** Yield: **4%**



Suppliers (179)

Suppliers (23)

31-614-CAS-29299264

Steps: **1** Yield: **4%**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Iridium, [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,κ$N^{1'}$]phenyl(6-phenyl[2,2'-bipyridin]-3-yl-κC^3,κ$N^{1'}$)(1,1,1-trifluoromethanesulfonato-κO)-, (OC-6-45)-
Solvents: Benzene; 4 h, 170 °C

Experimental Protocols

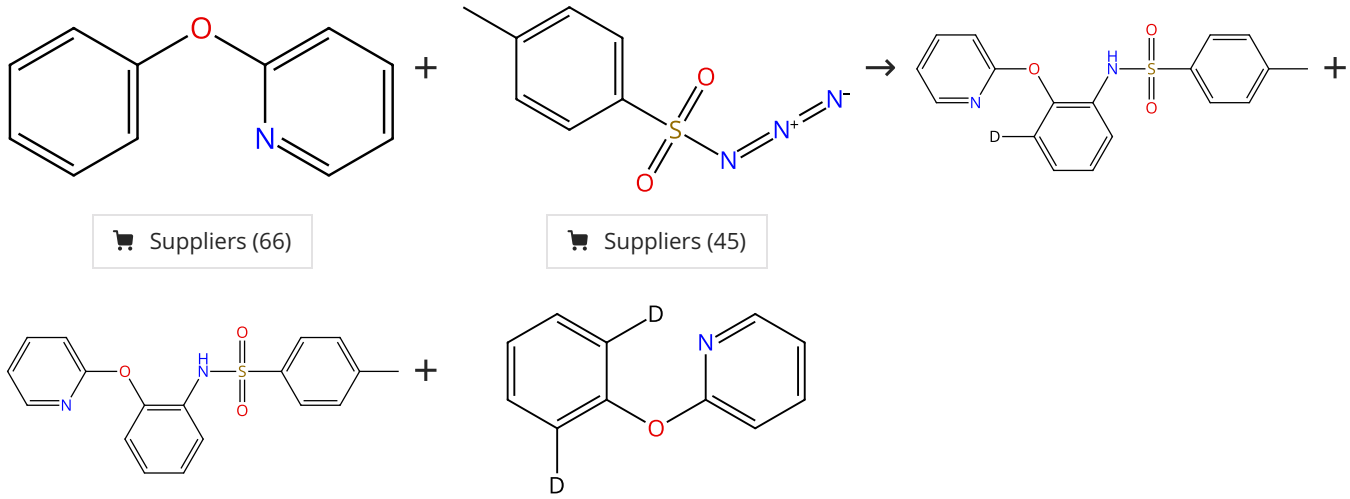
Cyclometalation of 6-Phenyl-2,2'-Bipyridine and Iridium: Synthesis, Characterization, and Reactivity Studies

By: Young, Kenneth J. H.; et al

Organometallics (2009), 28(12), 3395-3406.

Scheme 27 (1 Reaction)

Steps: **1** Yield: **68%**



Suppliers (66)

Suppliers (45)

31-080-CAS-17759733

Steps: **1** Yield: **68%**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-, Silver hexafluoro antimonate
Solvents: 1,2-Dichloroethane; 12 h, 80 °C

Experimental Protocols

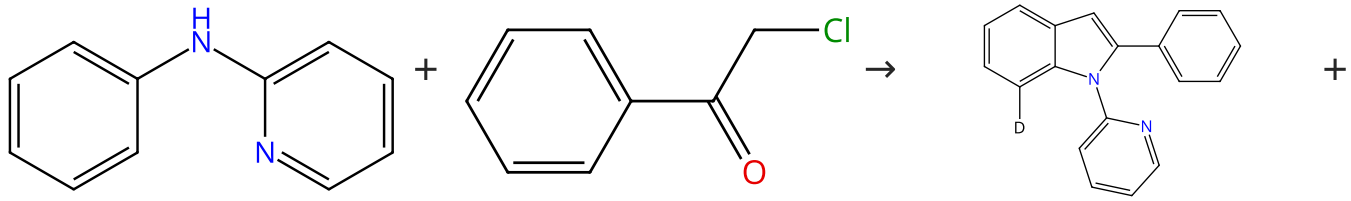
A Facile Route to Ortho-Hydroxyanilnes through an Ir^{III}-Catalyzed Direct C-H Amidation of 2-Phenoxypyridines

By: Wang, Lianhui; et al

Chemistry - An Asian Journal (2017), 12(19), 2634-2643.

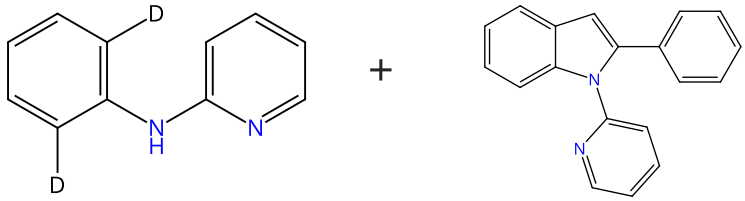
Scheme 28 (1 Reaction)

Steps: **1** Yield: **60%**



Suppliers (73)

Suppliers (45)



Suppliers (3)

31-116-CAS-22807074

Steps: **1** Yield: **60%**

1.1 **Reagents:** Acetic acid-d_4, Sodium fluoride
Catalysts: Iridium, di-μ-chlorodichlorobis[(1,2,3,4,5-η)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl]di-
Solvents: Methanol; 12 h, 90 °C

Experimental Protocols

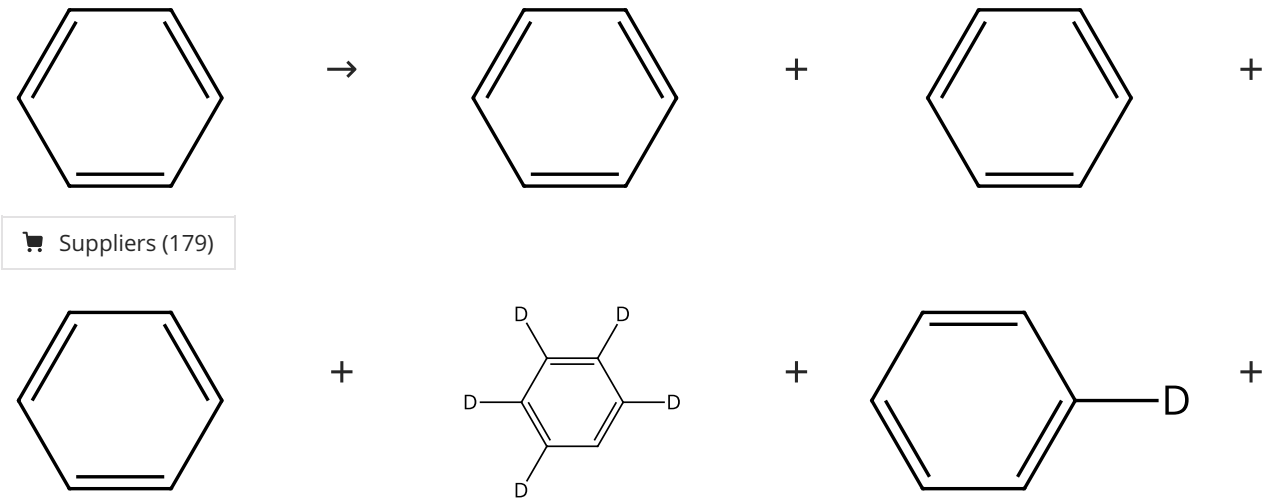
Iridium(III)-Catalyzed Tandem Annulation of Pyridine-Substituted Anilines and α-Cl Ketones for Obtaining 2-Arylindoles

By: Cui, Xin-Feng; et al

Journal of Organic Chemistry (2020), 85(21), 13517-13528.

Scheme 29 (1 Reaction)

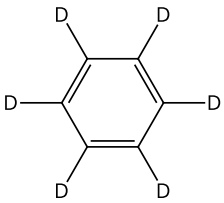
Steps: **1**



Suppliers (179)

Suppliers (17)

Suppliers (23)



Suppliers (143)

31-614-CAS-27707323	Steps: 1
1.1 **Reagents:** Acetic acid-d_4 **Catalysts:** Iridium, [4,4'-bis(1,1-dimethylethyl)-2,2'-bipyridine-κN^1,$\kappa N^{1'}$]methyl(6-phenyl[2,2'-bipyridin]-3-yl-κC^3,$\kappa N^{1'}$)(1,1,1-trifluoromethanesulfonato-κO)-, (*OC*-6-45)- **Solvents:** Toluene-d_8; 4 h, 170 °C	
Experimental Protocols	

Cyclometalation of 6-Phenyl-2,2'-Bipyridine and Iridium: Synthesis, Characterization, and Reactivity Studies

By: Young, Kenneth J. H.; et al

Organometallics (2009), 28(12), 3395-3406.