CAS SciFinder

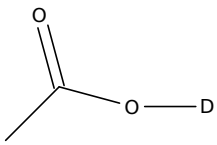
Task History

Initiating Search

February 23, 2025, 9:04 PM

Substances:

Filtered By:



Structure Match: **Substructure**

Search Tasks

Task	Search Type	View
Returned Substance Results + Filters (2,558)	Substances	View Results
Exported: Retrieved Related Reaction Results + Filters (14) Filtered By: Substance Role: **Reactant, Reagent, Solvent** Catalyst: **Bromopentacarbonylmanganese, Hexanoic acid, 2-ethyl-, manganese(2+) salt (2:1), Manganese diacetate** Document Type: **Journal** Language: **English**	Reactions	View Results

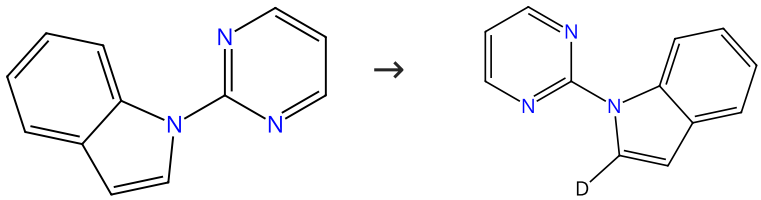
CAS SciFinder

Reactions (10)

View in CAS SciFinder

Scheme 1 (1 Reaction)

Steps: **1** Yield: **98%**



Suppliers (59)

Suppliers (3)

31-614-CAS-40989757

Steps: **1** Yield: **98%**

1.1 **Reagents:** Sodium acetate, Acetic acid-d_4
Catalysts: Bromopentacarbonylmanganese
Solvents: 1,4-Dioxane; 36 h, rt

Experimental Protocols

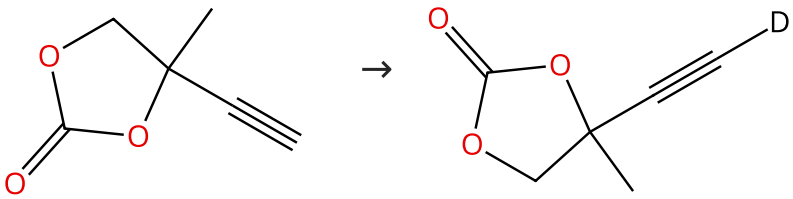
Manganese-Catalyzed Z-Selective Allylation of Indoles with Allenyl Derivatives

By: Vineet Kumar, Doppalapudi; et al

Journal of Organic Chemistry (2024), 89(14), 10087-10092.

Scheme 2 (1 Reaction)

Steps: **1** Yield: **83%**



Suppliers (2)

31-116-CAS-17886466

Steps: **1** Yield: **83%**

1.1 **Reagents:** Acetic acid-d_4, 4-Methyl-4-[(1*E*)-2-[1-(2-pyridinyl)-1*H*-indol-2-yl]ethenyl]-1,3-dioxolan-2-one
Catalysts: Bromopentacarbonylmanganese
Solvents: 1,4-Dioxane; 1 h, 60 °C; 60 °C → rt

Experimental Protocols

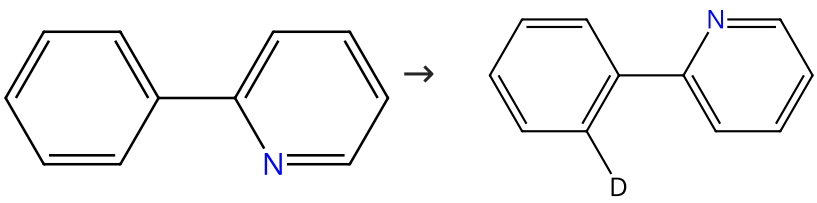
Synergistic Manganese(I) C-H Activation Catalysis in Continuous Flow: Chemoselective Hydroarylation

By: Wang, Hui; et al

Angewandte Chemie, International Edition (2017), 56(47), 15063-15067.

Scheme 3 (1 Reaction)

Steps: **1**



Suppliers (93)

Suppliers (6)

31-614-CAS-42032950 Steps: **1**

1.1 **Reagents:** Potassium acetate, Acetic acid-d_4
Catalysts: Bromopentacarbonylmanganese
Solvents: 1,2-Dichloroethane; 12 h, 110 °C

Experimental Protocols

Mn(I)-Catalyzed Site-Selective C-H Activation: Unlocking Access to 3-Arylated Succinimides from 2-Arylpyridines and Maleimides

By: Gola, Ajay Kant; et al

Journal of Organic Chemistry (2024), 89(20), 15020-15025.

Scheme 4 (1 Reaction) Steps: **1**

Double bond geometry shown Double bond geometry shown

31-116-CAS-17886465 Steps: **1 Failed**

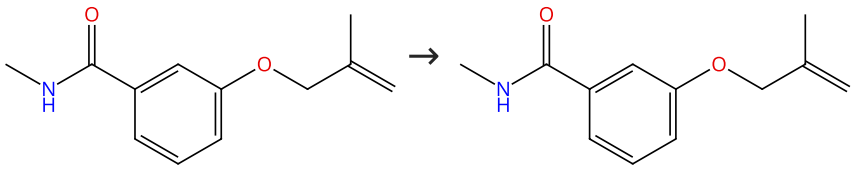
1.1 **Reagents:** Acetic acid-d_4
Catalysts: Bromopentacarbonylmanganese
Solvents: 1,4-Dioxane; 1 h, 60 °C; 60 °C → rt

Synergistic Manganese(I) C-H Activation Catalysis in Continuous Flow: Chemoselective Hydroarylation

By: Wang, Hui; et al

Angewandte Chemie, International Edition (2017), 56(47), 15063-15067.

Scheme 5 (1 Reaction) Steps: **1**



Suppliers (3)

31-614-CAS-26729792 Steps: **1**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Manganese diacetate, Silver hexafluoroantimonate, Bis(dichloro(η^6-*p*-cymene)ruthenium); 6 h, 70 °C

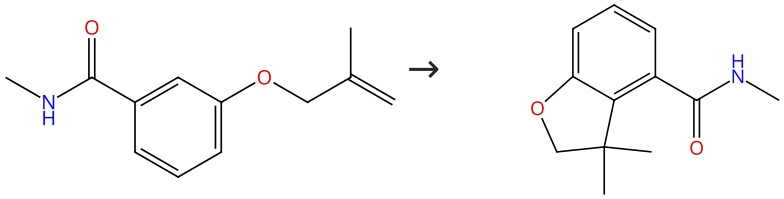
Experimental Protocols

Ruthenium-Catalyzed Intramolecular Hydroarylation of Arenes and Mechanistic Study: Synthesis of Dihydroben zofurans, Indolines, and Chromans

By: Rit, Raja K.; et al

Journal of Organic Chemistry (2016), 81(18), 8552-8560.

Scheme 6 (1 Reaction) Steps: **1**



Suppliers (3)

31-614-CAS-28330593 Steps: 1

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Manganese diacetate, Silver hexafluoroantimonate, Bis(dichloro(η^6-*p*-cymene)ruthenium); 5 h, 70 °C

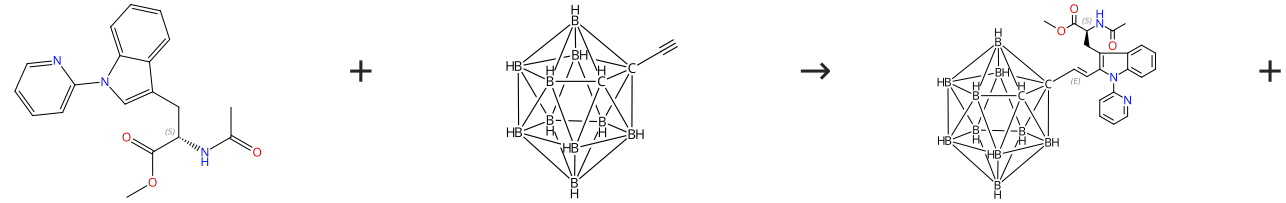
Experimental Protocols

Ruthenium-Catalyzed Intramolecular Hydroarylation of Arenes and Mechanistic Study: Synthesis of Dihydrobenzofurans, Indolines, and Chromans

By: Rit, Raja K.; et al

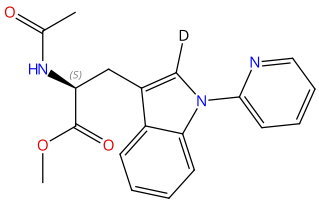
Journal of Organic Chemistry (2016), 81(18), 8552-8560.

Scheme 7 (1 Reaction) Steps: **1** Yield: **70%**



Absolute stereochemistry shown

Absolute stereochemistry shown
Double bond geometry shown



Absolute stereochemistry shown

31-614-CAS-33753695 Steps: **1** Yield: **70%**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Bromopentacarbonylmanganese
Solvents: 1,4-Dioxane; 16 h, 80 °C

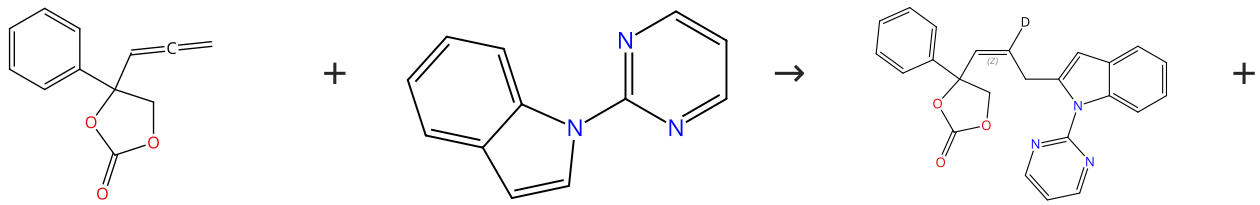
Experimental Protocols

Selective Labeling of Peptides with o-Carboranes via Manganese(I)-Catalyzed C-H Activation

By: Jei, Becky Bongsuiru; et al

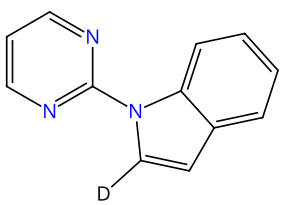
Chemistry - A European Journal (2022), 28(37), e202200811.

Scheme 8 (1 Reaction) Steps: **1** Yield: **58%**



Suppliers (59)

Double bond geometry shown



Suppliers (3)

31-614-CAS-40989760 Steps: **1** Yield: **58%**

1.1 **Reagents:** Sodium acetate, Acetic acid-d_4
Catalysts: Bromopentacarbonylmanganese
Solvents: 1,4-Dioxane; 2 h, 60 °C

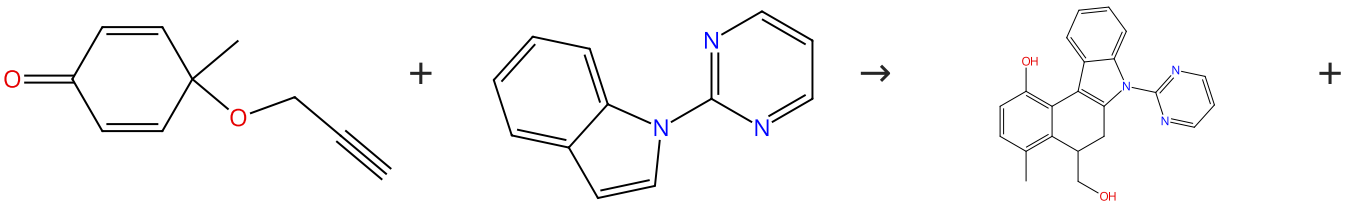
Experimental Protocols

Manganese-Catalyzed Z-Selective Allylation of Indoles with Allenyl Derivatives

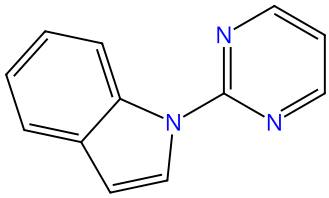
By: Vineet Kumar, Doppalapudi; et al

Journal of Organic Chemistry (2024), 89(14), 10087-10092.

Scheme 9 (1 Reaction) Steps: **1**



Suppliers (2) Suppliers (59)



31-614-CAS-29705482 Steps: **1**

1.1 **Reagents:** Propanoic acid-*d*, 2,2-dimethyl-
Catalysts: Zinc acetate, Bromopentacarbonylmanganese
Solvents: 1,2-Dichloroethane; 8 h, 120 °C

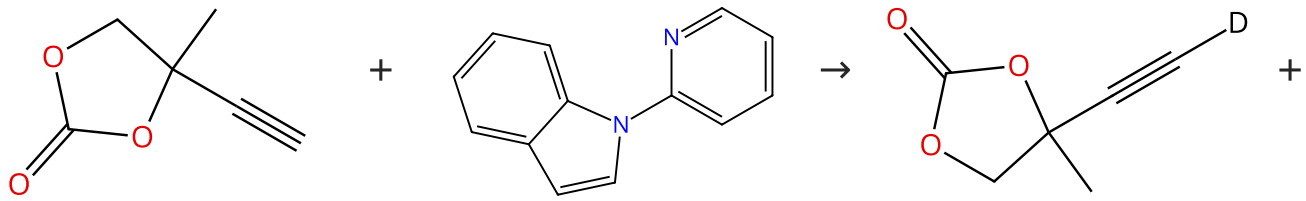
Experimental Protocols

Divergent Annulative C-C Coupling of Indoles Initiated by Manganese-Catalyzed C-H Activation

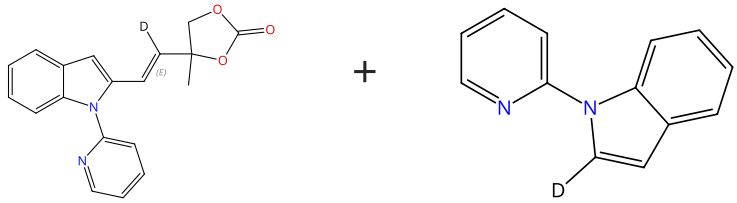
By: Liu, Bingxian; et al

ACS Catalysis (2018), 8(10), 9463-9470.

Scheme 10 (1 Reaction) Steps: **1** Yield: **58%**



Suppliers (2) Suppliers (36)



Double bond geometry shown

31-116-CAS-17886464 Steps: **1** Yield: **58%**

1.1 **Reagents:** Acetic acid-d_4
Catalysts: Bromopentacarbonylmanganese
Solvents: 1,4-Dioxane; 1 h, 60 °C; 60 °C → rt

Experimental Protocols

Synergistic Manganese(I) C-H Activation Catalysis in Continuous Flow: Chemoselective Hydroarylation

By: Wang, Hui; et al

Angewandte Chemie, International Edition (2017), 56(47), 15063-15067.