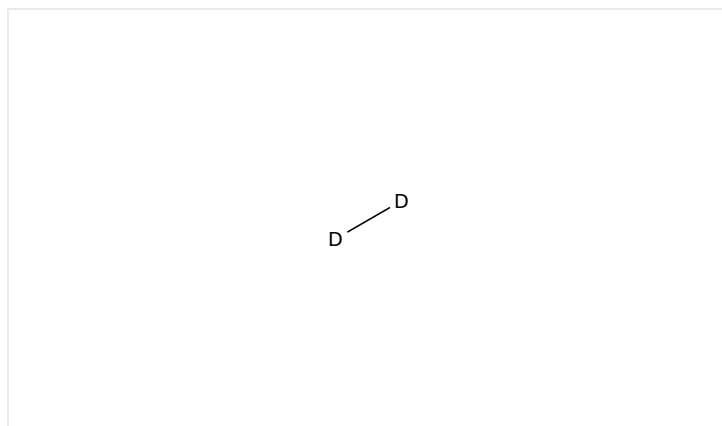


## Initiating Search



February 21, 2025, 10:42 AM

 Substances:

Filtered By:

Structure Match: **As Drawn**

## Search Tasks

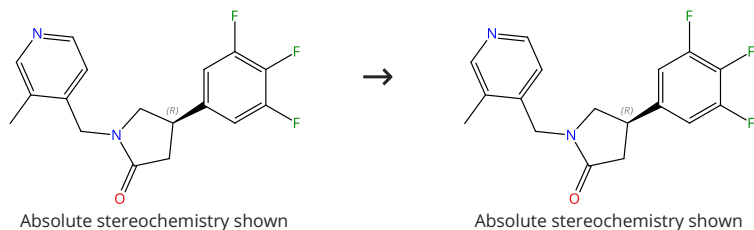
Task	Search Type	View
Returned Substance Results + Filters (2,301)	 Substances	<a href="#">View Results</a>
Exported: Retrieved Related Reaction Results + Filters (47)	 Reactions	<a href="#">View Results</a>
Filtered By:		
Structure Match: <b>As Drawn</b>		
Kept Selected Results		

# Reactions (44)

[View in CAS SciFinder](#)

Scheme 1 (1 Reaction)

Steps: 1 Yield: 99%


 Suppliers (22)

31-614-CAS-39216789

Steps: 1 Yield: 99%

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

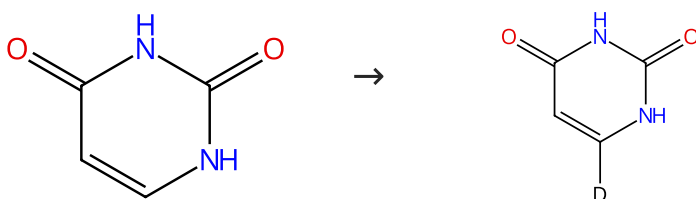
Catalysts: Palladium

Solvents: Dimethylacetamide; -196 °C → rt; 20 h, rt

Experimental Protocols

Scheme 2 (1 Reaction)

Steps: 1 Yield: 96%


 Suppliers (145)

 Suppliers (17)

31-116-CAS-4988718

Steps: 1 Yield: 96%

**Syntheses of [5-<sup>2</sup>H]-uracil, [5-<sup>2</sup>H]-cytosine, [6-<sup>2</sup>H]-uracil and [6-<sup>2</sup>H]-cytosine**

By: Kiritani, Reiko; et al

Journal of Labelled Compounds and Radiopharmaceuticals (1986), 23(2), 207-14.

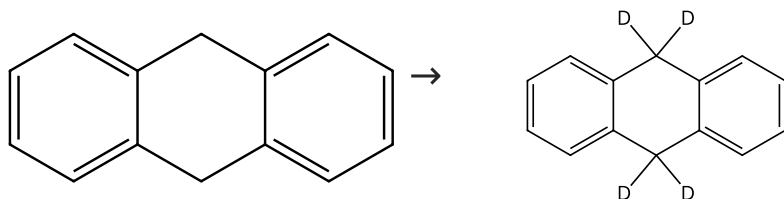

1.1 Reagents: Deuterium, Sodium hydroxide-*d*

Catalysts: Calcium carbonate, Palladium

Solvents: Water-*d*<sub>2</sub>

Scheme 3 (1 Reaction)

Steps: 1 Yield: 95%

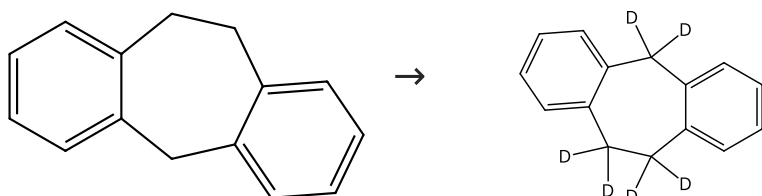

 Suppliers (68)

 Supplier (1)

31-116-CAS-5203181	Steps: 1 Yield: 95%	<b>A selective method for deuterium exchange in hydroaromatic compounds</b>
1.1 Reagents: Deuterium Catalysts: Palladium Solvents: Acetic acid- <i>d</i>		By: Ofosu-Asante, K.; et al Journal of Organic Chemistry (1986), 51(26), 5452-4.

Scheme 4 (1 Reaction)

Steps: 1 Yield: 93%

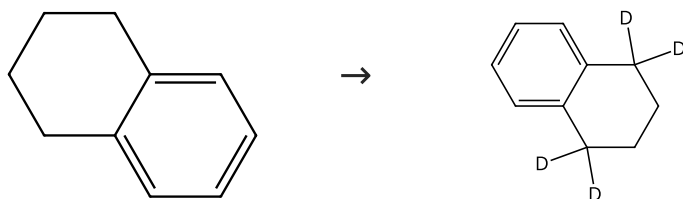


Suppliers (40)

31-116-CAS-11664295	Steps: 1 Yield: 93%	<b>High-resolution EPR spectroscopic investigations of a homologous set of d<sup>9</sup>-cobalt(0), d<sup>9</sup>-rhodium(0), and d<sup>9</sup>-iridium(0) complexes</b>
1.1 Reagents: Deuterium Catalysts: Palladium Solvents: Acetic acid- <i>d</i>		By: Deblon, Stephan; et al Chemistry - A European Journal (2002), 8(3), 601-611.

Scheme 5 (2 Reactions)

Steps: 1 Yield: 90-92%

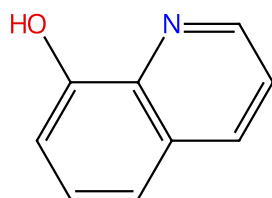


Suppliers (104)

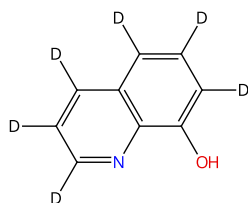
31-116-CAS-11267807	Steps: 1 Yield: 92%	<b>Hydrogen transfer reactions. 15. The transition state in the dehydrogenation of dihydroarenes by quinones</b>
1.1 Reagents: Deuterium Catalysts: Palladium Solvents: Acetic acid- <i>d</i>		By: Radtke, Rainer; et al Chemische Berichte (1990), 123(3), 627-33.
31-116-CAS-3074194	Steps: 1 Yield: 90%	<b>A selective method for deuterium exchange in hydroaromatic compounds</b>
1.1 Reagents: Deuterium Catalysts: Palladium Solvents: Acetic acid- <i>d</i>		By: Ofosu-Asante, K.; et al Journal of Organic Chemistry (1986), 51(26), 5452-4.

Scheme 6 (1 Reaction)

Steps: 1 Yield: 92%



Suppliers (141)



Suppliers (5)

31-116-CAS-9297566

Steps: 1 Yield: 92%

Synthesis of a delta opioid agonist in [ $^2\text{H}_6$ ], [ $^2\text{H}_4$ ], [ $^{11}\text{C}$ ], and [ $^{14}\text{C}$ ] labeled forms

1.1 Reagents: Deuterium, Water- $d_2$

Catalysts: Palladium

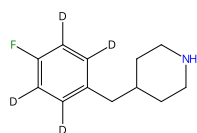
Solvents: Water- $d_2$ ; 16 h, 145 °C

By: Elmore, Charles S.; et al

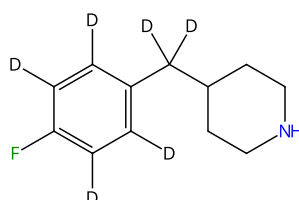
Journal of Labelled Compounds and Radiopharmaceuticals (2011), 54(14), 847-854.

Scheme 7 (1 Reaction)

Steps: 1 Yield: 90%



• HCl



31-116-CAS-4563156

Steps: 1 Yield: 90%

Convenient methods for the synthesis of  $d_4$ ,  $d_2$  and  $d_6$  isotopomers of 4-(4-fluorobenzyl)piperidine

1.1 Reagents: Deuterium chloride, Deuterium

Catalysts: Palladium

Solvents: Methanol- $d$ , Water- $d_2$ ; 6 h, 3 bar, 60 °C

By: Prosenyak, Agnes; et al

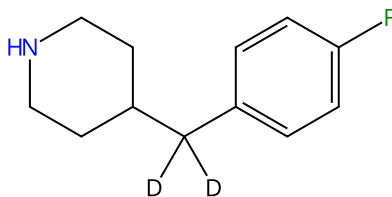
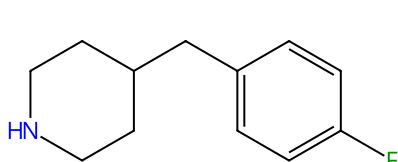
Journal of Labelled Compounds & Radiopharmaceuticals (2005), 48(6), 421-427.

1.2 Reagents: Sodium hydroxide

Solvents: Water

Scheme 8 (1 Reaction)

Steps: 1 Yield: 90%



Suppliers (79)

31-116-CAS-11564808

Steps: 1 Yield: 90%

Convenient methods for the synthesis of  $d_4$ ,  $d_2$  and  $d_6$  isotopomers of 4-(4-fluorobenzyl)piperidine

1.1 Reagents: Deuterium chloride, Deuterium

Catalysts: Palladium

Solvents: Methanol- $d$ , Water- $d_2$ ; 6 h, 3 bar, 60 °C

By: Prosenyak, Agnes; et al

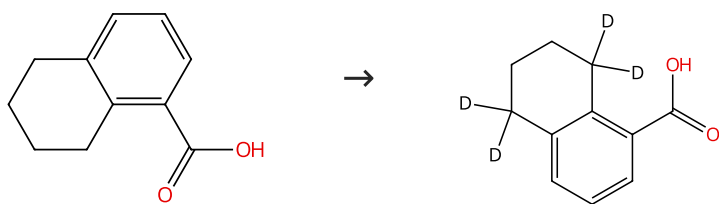
Journal of Labelled Compounds & Radiopharmaceuticals (2005), 48(6), 421-427.

1.2 Reagents: Sodium hydroxide

Solvents: Water

Scheme 9 (1 Reaction)

Steps: 1 Yield: 88%



Suppliers (87)

Supplier (1)

31-116-CAS-7646392

Steps: 1 Yield: 88%

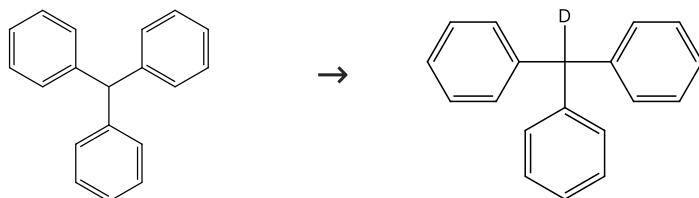
**A selective method for deuterium exchange in hydroaromatic compounds**

1.1 Reagents: Deuterium  
Catalysts: Palladium  
Solvents: Acetic acid-*d*

By: Ofosu-Asante, K.; et al  
Journal of Organic Chemistry (1986), 51(26), 5452-4.

Scheme 10 (1 Reaction)

Steps: 1 Yield: 87%



Suppliers (85)

Suppliers (2)

31-116-CAS-5486131

Steps: 1 Yield: 87%

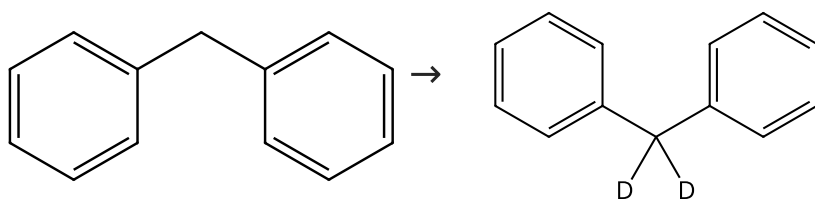
**A selective method for deuterium exchange in hydroaromatic compounds**

1.1 Reagents: Deuterium  
Catalysts: Palladium  
Solvents: Acetic acid-*d*

By: Ofosu-Asante, K.; et al  
Journal of Organic Chemistry (1986), 51(26), 5452-4.

Scheme 11 (1 Reaction)

Steps: 1 Yield: 85%



Suppliers (87)

Suppliers (4)

31-116-CAS-9493526

Steps: 1 Yield: 85%

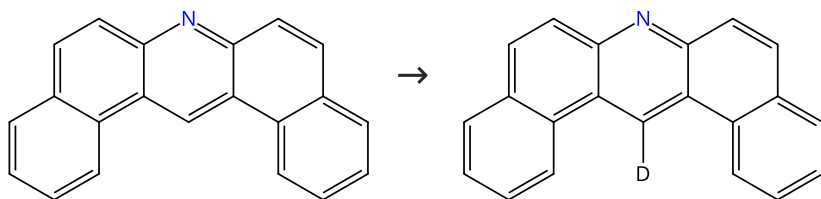
**A selective method for deuterium exchange in hydroaromatic compounds**

1.1 Reagents: Deuterium  
Catalysts: Palladium  
Solvents: Acetic acid-*d*

By: Ofosu-Asante, K.; et al  
Journal of Organic Chemistry (1986), 51(26), 5452-4.

Scheme 12 (1 Reaction)

Steps: 1 Yield: 83%



Suppliers (33)

31-116-CAS-13699197

Steps: 1 Yield: 83%

**The preparation of regiospecific tritiated and deuterated dibenzacridines by catalytic exchange and [14-<sup>14</sup>C]dibenz[a,j]acridine**

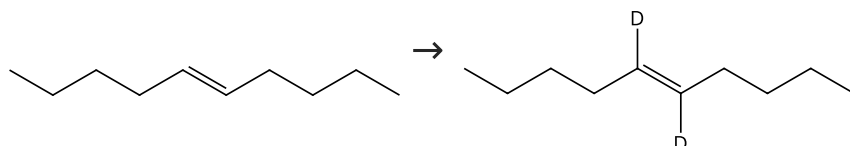
By: Rosario, Christopher A.; et al

Journal of Labelled Compounds and Radiopharmaceuticals (1987), 24(1), 23-8.

- 1.1 Reagents: Calcium carbonate, Deuterium  
Catalysts: Palladium  
Solvents: 1,4-Dioxane
- 1.2 Reagents: Oxygen  
Solvents: Acetic acid

Scheme 13 (1 Reaction)

Steps: 1 Yield: 81%



Suppliers (6)

31-116-CAS-3679279

Steps: 1 Yield: 81%

**Reactivity of  $\gamma$ -chloro-*gem*-trichloro alkanes with chromous chloride**

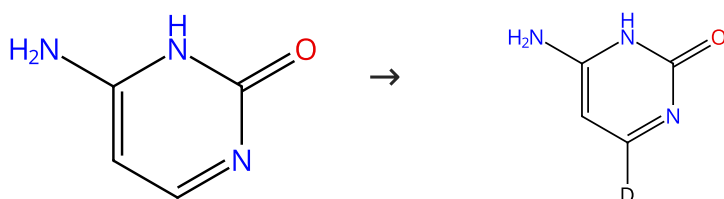
By: Tisserand, Steve; et al

Tetrahedron Letters (2006), 47(29), 5177-5180.

- 1.1 Reagents: Deuterium  
Catalysts: Palladium  
Solvents: Diethyl ether; 1.5 h, 1 bar, rt

Scheme 14 (1 Reaction)

Steps: 1 Yield: 79%



Suppliers (129)

31-116-CAS-7264406

Steps: 1 Yield: 79%

**Syntheses of [5-<sup>2</sup>H]-uracil, [5-<sup>2</sup>H]-cytosine, [6-<sup>2</sup>H]-uracil and [6-<sup>2</sup>H]-cytosine**

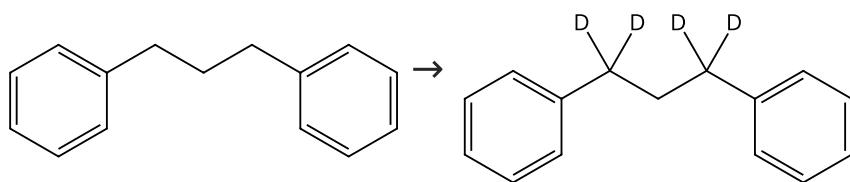
By: Kiritani, Reiko; et al

Journal of Labelled Compounds and Radiopharmaceuticals (1986), 23(2), 207-14.

- 1.1 Reagents: Deuterium, Sodium hydroxide-*d*  
Catalysts: Calcium carbonate, Palladium  
Solvents: Water-*d*<sub>2</sub>

Scheme 15 (1 Reaction)

Steps: 1 Yield: 74%



Suppliers (70)

Supplier (1)

31-116-CAS-975958

Steps: 1 Yield: 74%

**A selective method for deuterium exchange in hydroaromatic compounds**

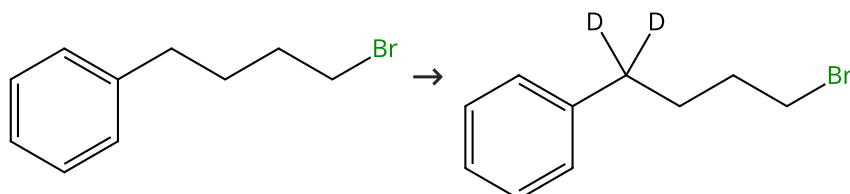
1.1 Reagents: Deuterium  
Catalysts: Palladium  
Solvents: Acetic acid-*d*

By: Ofosu-Asante, K.; et al

Journal of Organic Chemistry (1986), 51(26), 5452-4.

Scheme 16 (1 Reaction)

Steps: 1 Yield: 74%



Suppliers (88)

Supplier (1)

31-116-CAS-17238853

Steps: 1 Yield: 74%

**Cobalt-Porphyrin-Catalysed Intramolecular Ring-Closing C-H Amination of Aliphatic Azides: A Nitrene-Radical Approach to Saturated Heterocycles**

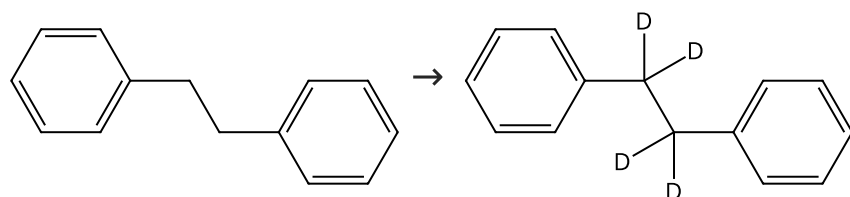
1.1 Reagents: Deuterium  
Catalysts: Palladium  
Solvents: Methanol-*d*<sub>4</sub>; 20 h, rt

By: Kuijpers, Petrus F.; et al

Chemistry - A European Journal (2017), 23(33), 7945-7952.

Scheme 17 (1 Reaction)

Steps: 1 Yield: 70%



Suppliers (93)

Supplier (1)

31-116-CAS-3363492

Steps: 1 Yield: 70%

**A selective method for deuterium exchange in hydroaromatic compounds**

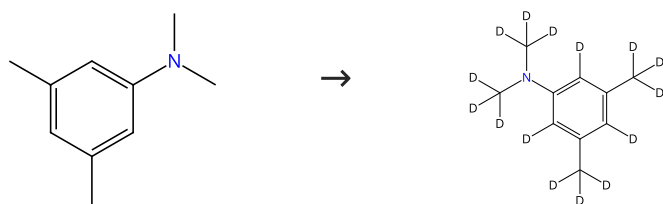
1.1 Reagents: Deuterium  
Catalysts: Palladium  
Solvents: Acetic acid-*d*

By: Ofosu-Asante, K.; et al

Journal of Organic Chemistry (1986), 51(26), 5452-4.

Scheme 18 (1 Reaction)

Steps: 1 Yield: 54%



Suppliers (56)

31-116-CAS-20244030

Steps: 1 Yield: 54%

**Fine-tuning the efficiency of para-hydrogen-induced hyperpolarization by rational N-heterocyclic carbene design**

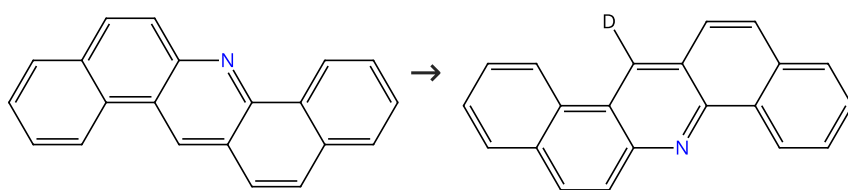
By: Rayner, Peter J.; et al

Nature Communications (2018), 9(1), 1-11.

1.1 **Reagents:** Deuterium  
**Catalysts:** Palladium  
**Solvents:** Water- $d_2$ ; 18 h, 2 bar, 150 °C

Scheme 19 (1 Reaction)

Steps: 1 Yield: 34%



Suppliers (31)

31-116-CAS-2451998

Steps: 1 Yield: 34%

**The preparation of regiospecific tritiated and deuterated dibenzacridines by catalytic exchange and [14- $^{14}\text{C}$ ]dibenz[a,j]acridine**

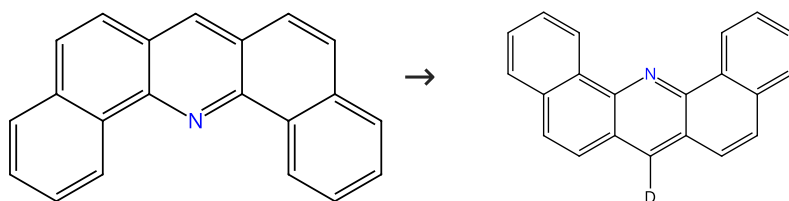
By: Rosario, Christopher A.; et al

Journal of Labelled Compounds and Radiopharmaceuticals (1987), 24(1), 23-8.

1.1 **Reagents:** Calcium carbonate, Deuterium  
**Catalysts:** Palladium  
**Solvents:** 1,4-Dioxane

Scheme 20 (1 Reaction)

Steps: 1 Yield: 17%



Suppliers (21)

31-116-CAS-6709832

Steps: 1 Yield: 17%

**The preparation of regiospecific tritiated and deuterated dibenzacridines by catalytic exchange and [14- $^{14}\text{C}$ ]dibenz[a,j]acridine**

By: Rosario, Christopher A.; et al

Journal of Labelled Compounds and Radiopharmaceuticals (1987), 24(1), 23-8.

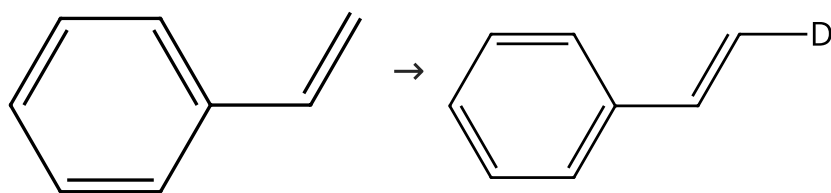
1.1 **Reagents:** Calcium carbonate, Deuterium  
**Catalysts:** Palladium  
**Solvents:** 1,4-Dioxane

1.2 **Reagents:** Oxygen  
**Solvents:** Acetic acid



Scheme 21 (1 Reaction)

Steps: 1



Suppliers (122)

Supplier (1)

31-614-CAS-36265911

Steps: 1

**Atomically dispersed palladium catalyzes H/D exchange and isomerization of alkenes via reversible insertion and elimination**

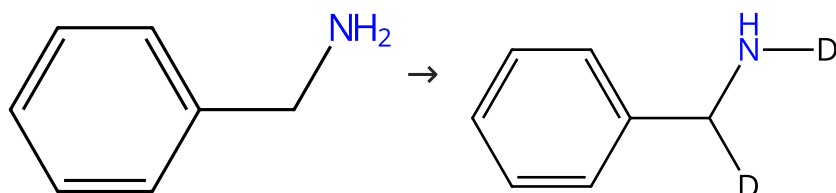
By: Liu, Kunlong; et al

Chem Catalysis (2021), 1(7), 1480-1492.

1.1 **Reagents:** Deuterium  
**Catalysts:** Copper oxide (Cu<sub>2</sub>O), Palladium; 450 min, 0.1 MPa, 30 °C

Scheme 22 (1 Reaction)

Steps: 1



Suppliers (87)

31-116-CAS-21488071

Steps: 1

**Efficient and Mild Reductive Amination of Carbonyl Compounds Catalyzed by Dual-Function Palladium Nanoparticles**

By: Jv, Xinchun; et al

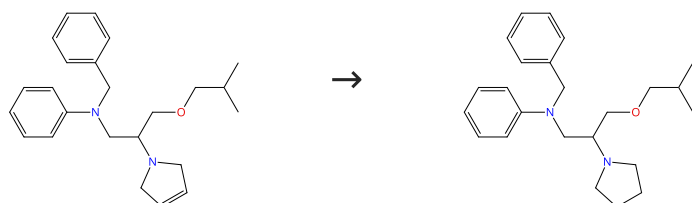
ACS Sustainable Chemistry &amp; Engineering (2020), 8(3), 1618-1626.

1.1 **Reagents:** Deuterium  
**Catalysts:** 4-Methylbenzylamine (complexes with palladium), Palladium (complexes with aryl amines)  
**Solvents:** Water; 1 h, pH 2, 1 atm, rt

Experimental Protocols

Scheme 23 (1 Reaction)

Steps: 1



31-614-CAS-28234664

Steps: 1

**Tritium nuclear magnetic resonance spectroscopy of bepridilpyrrolidine-t**

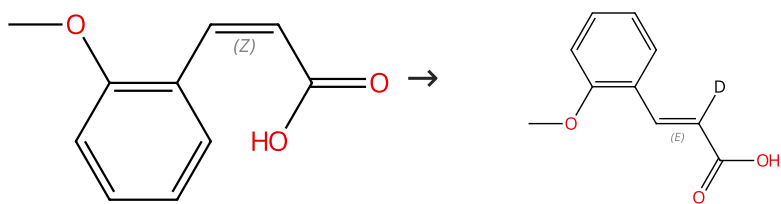
By: Kaspersen, Frans M.; et al

Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1986), (4), 585-91.

1.1 **Reagents:** Deuterium  
**Catalysts:** Palladium  
**Solvents:** Benzene

Scheme 24 (1 Reaction)

Steps: 1



Double bond geometry shown

Double bond geometry shown

Suppliers (58)

31-614-CAS-36265915

Steps: 1

**Atomically dispersed palladium catalyzes H/D exchange and isomerization of alkenes via reversible insertion and elimination**

By: Liu, Kunlong; et al

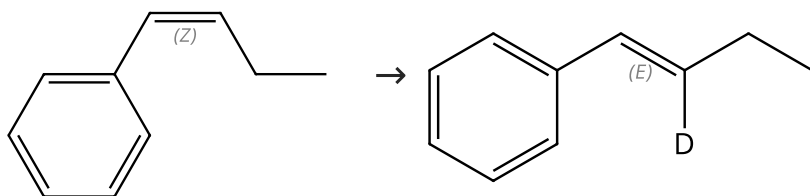
Chem Catalysis (2021), 1(7), 1480-1492.

1.1 Reagents: Deuterium

Catalysts: Copper oxide (Cu<sub>2</sub>O), Palladium; 450 min, 0.1 M Pa, 30 °C

Scheme 25 (1 Reaction)

Steps: 1



Double bond geometry shown

Double bond geometry shown

Suppliers (4)

31-614-CAS-36265917

Steps: 1

**Atomically dispersed palladium catalyzes H/D exchange and isomerization of alkenes via reversible insertion and elimination**

By: Liu, Kunlong; et al

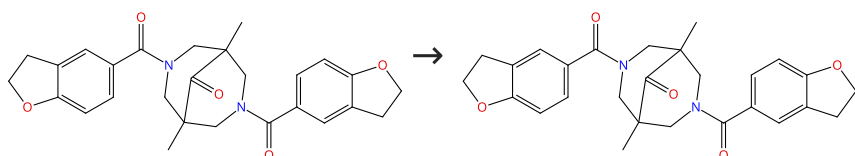
Chem Catalysis (2021), 1(7), 1480-1492.

1.1 Reagents: Deuterium

Catalysts: Copper oxide (Cu<sub>2</sub>O), Palladium; 450 min, 0.1 M Pa, 30 °C

Scheme 26 (1 Reaction)

Steps: 1



31-614-CAS-29070914

Steps: 1

**Synthesis of tritium-labeled PAM-43**

By: Nagaev, Igor Yu.; et al

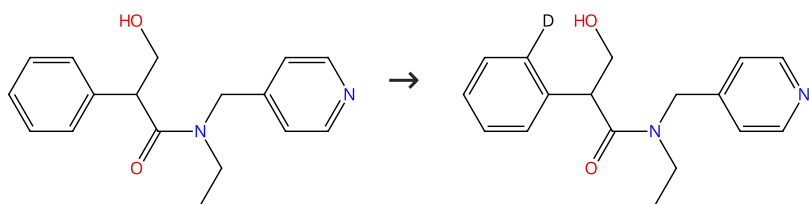
Mendelev Communications (2018), 28(1), 64-65.

1.1 Reagents: Deuterium

Catalysts: Palladium

Scheme 27 (1 Reaction)

Steps: 1



31-614-CAS-26649657

Steps: 1

**Palladium(II)-Mediated C-H Tritiation of Complex Pharmaceuticals**

By: Yang, Haifeng; et al

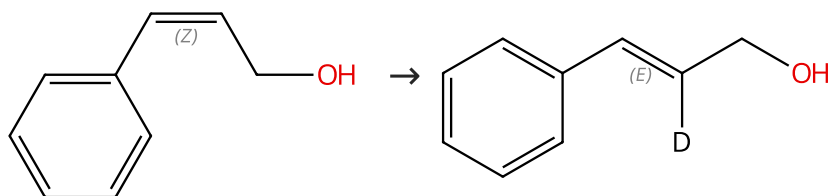
Angewandte Chemie, International Edition (2018), 57(7), 1883-1887.

1.1 **Catalysts:** Trifluoroacetic acid, Palladium diacetate**Solvents:** 1,1,1,3,3,3-Hexafluoro-2-propanol; 2 h, 40 °C; 40 °C → 23 °C1.2 **Reagents:** Cesium carbonate**Catalysts:** 2-(Di-*tert*-butylphosphino)biphenyl**Solvents:** 1,1,1,3,3,3-Hexafluoro-2-propanol; 10 min, 23 °C1.3 **Reagents:** Deuterium; 18 h, 23 °C

Experimental Protocols

Scheme 28 (1 Reaction)

Steps: 1



Double bond geometry shown

Suppliers (40)

Double bond geometry shown

Supplier (1)

31-614-CAS-36265920

Steps: 1

**Atomically dispersed palladium catalyzes H/D exchange and isomerization of alkenes via reversible insertion and elimination**

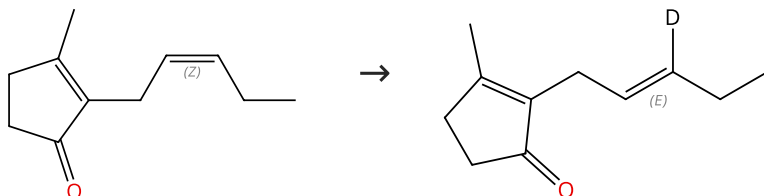
By: Liu, Kunlong; et al

Chem Catalysis (2021), 1(7), 1480-1492.

1.1 **Reagents:** Deuterium**Catalysts:** Copper oxide (Cu<sub>2</sub>O), Palladium; 450 min, 0.1 MPa, 30 °C

Scheme 29 (1 Reaction)

Steps: 1



Double bond geometry shown

Suppliers (68)

Double bond geometry shown

31-614-CAS-36265916

Steps: 1

**Atomically dispersed palladium catalyzes H/D exchange and isomerization of alkenes via reversible insertion and elimination**

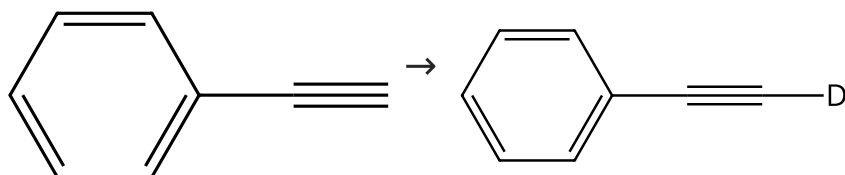
By: Liu, Kunlong; et al

Chem Catalysis (2021), 1(7), 1480-1492.

1.1 **Reagents:** Deuterium**Catalysts:** Copper oxide (Cu<sub>2</sub>O), Palladium; 450 min, 0.1 MPa, 30 °C

Scheme 30 (1 Reaction)

Steps: 1



Suppliers (73)

Suppliers (11)

31-614-CAS-36089369

Steps: 1

**Tripodal Pd metallenes mediated by Nb<sub>2</sub>C MXenes for boosting alkynes semihydrogenation**

By: Wei, Zhongzhe; et al

Nature Communications (2023), 14(1), 661.

1.1 Reagents: Deuterium

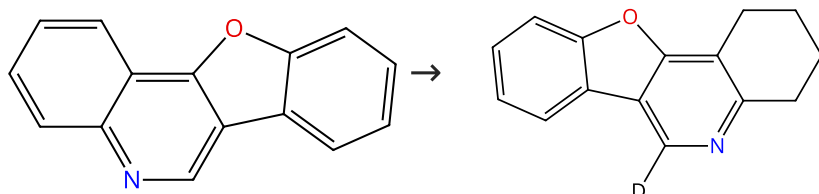
Catalysts: Palladium, Niobium carbide (Nb<sub>2</sub>C)

Solvents: Isopropanol; 0.1 MPa, rt → 298 K

Experimental Protocols

Scheme 31 (1 Reaction)

Steps: 1



Suppliers (2)

31-614-CAS-39390206

Steps: 1

**Regioselective Partial Hydrogenation and Deuteration of Tetracyclic (Hetero)aromatic Systems Using a Simple Heterogeneous Catalyst**

By: Kehoe, Roberta A.; et al

Chemistry - A European Journal (2024), 30(17), e202400102.

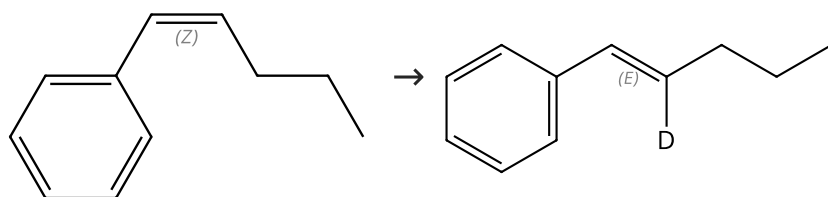
1.1 Reagents: Acetic acid, Deuterium

Catalysts: Palladium; 24 h, 80 °C

1.2 Reagents: Sodium bicarbonate

Scheme 32 (1 Reaction)

Steps: 1



Double bond geometry shown

Double bond geometry shown

Suppliers (3)

31-614-CAS-36265914

Steps: 1

**Atomically dispersed palladium catalyzes H/D exchange and isomerization of alkenes via reversible insertion and elimination**

By: Liu, Kunlong; et al

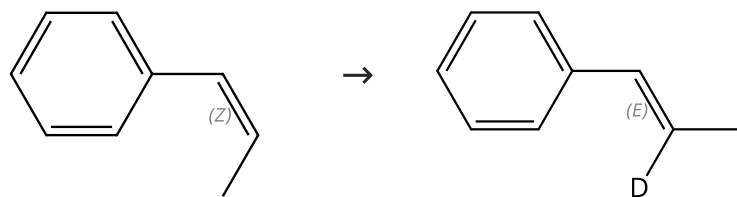
Chem Catalysis (2021), 1(7), 1480-1492.

1.1 Reagents: Deuterium

Catalysts: Copper oxide (Cu<sub>2</sub>O), Palladium; 450 min, 0.1 MPa, 30 °C

## Scheme 33 (1 Reaction)

Steps: 1



Double bond geometry shown

Double bond geometry shown

Suppliers (69)

Supplier (1)

31-614-CAS-36265910

Steps: 1

**Atomically dispersed palladium catalyzes H/D exchange and isomerization of alkenes via reversible insertion and elimination**

By: Liu, Kunlong; et al

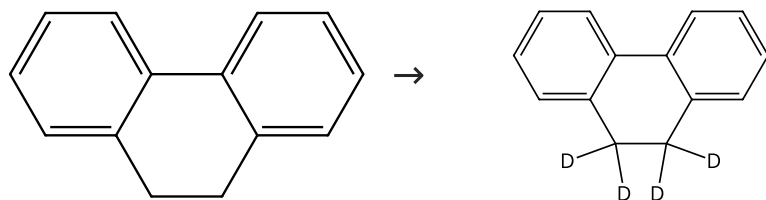
Chem Catalysis (2021), 1(7), 1480-1492.

1.1 Reagents: Deuterium

Catalysts: Copper oxide (Cu<sub>2</sub>O), Palladium; 450 min, 0.1 MPa, 30 °C

## Scheme 34 (1 Reaction)

Steps: 1



Suppliers (52)

31-116-CAS-7399973

Steps: 1

**A selective method for deuterium exchange in hydroaromatic compounds**

By: Ofosu-Asante, K.; et al

Journal of Organic Chemistry (1986), 51(26), 5452-4.

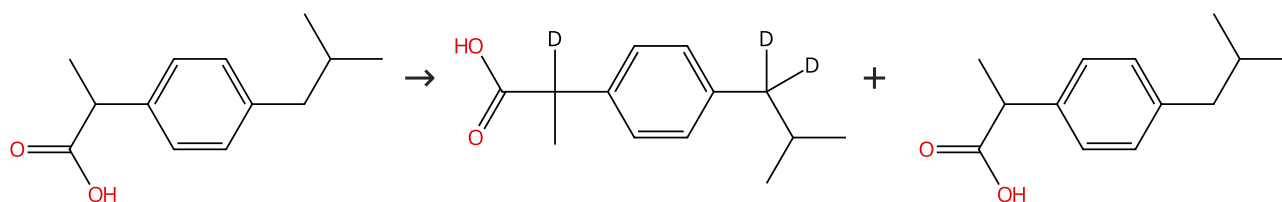
1.1 Reagents: Deuterium

Catalysts: Palladium

Solvents: Acetic acid-*d*

## Scheme 35 (1 Reaction)

Steps: 1



Suppliers (157)

31-614-CAS-39216784

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

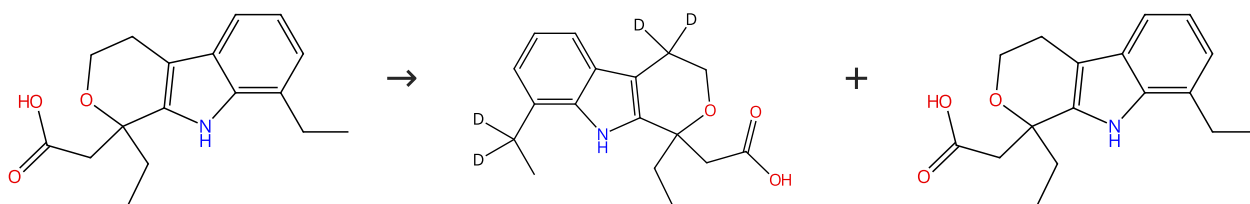
Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

Experimental Protocols

Scheme 36 (1 Reaction)

Steps: 1



Suppliers (101)

31-614-CAS-39216785

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

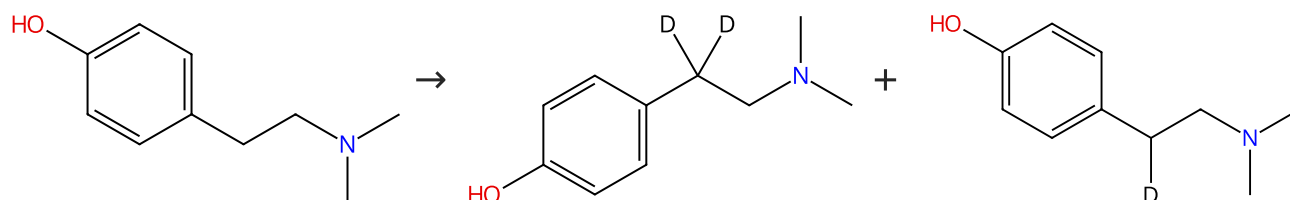
Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

Experimental Protocols

Scheme 37 (1 Reaction)

Steps: 1



Suppliers (78)

31-614-CAS-39216773

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

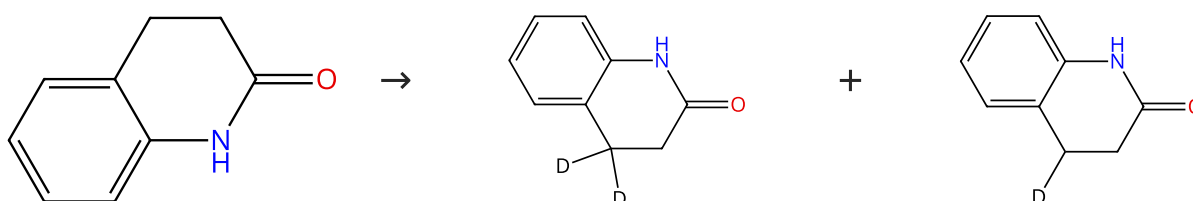
Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

Experimental Protocols

Scheme 38 (1 Reaction)

Steps: 1



Suppliers (94)

Supplier (1)

31-614-CAS-38893217

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

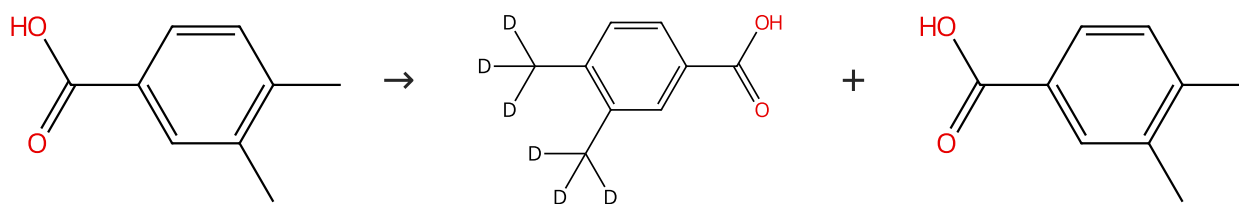
Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

Experimental Protocols

Scheme 39 (1 Reaction)

Steps: 1



Suppliers (101)

31-614-CAS-39216778

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

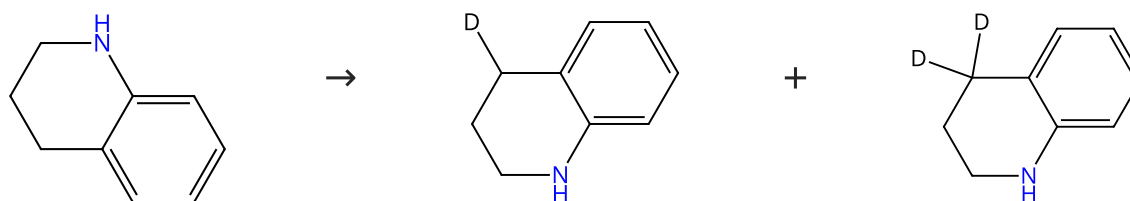
Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

Experimental Protocols

Scheme 40 (1 Reaction)

Steps: 1



Suppliers (98)

Supplier (1)

31-614-CAS-39216772

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

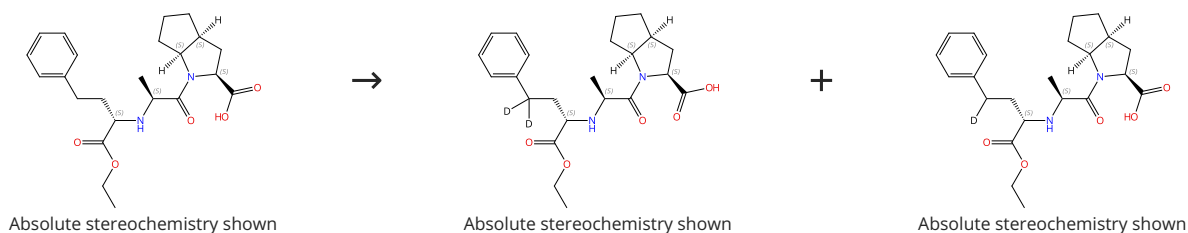
Catalysts: Palladium

Solvents: Tetrahydrofuran; 20 h, 1.1 bar, 50 °C

Experimental Protocols

Scheme 41 (1 Reaction)

Steps: 1



Absolute stereochemistry shown

Absolute stereochemistry shown

Absolute stereochemistry shown

Suppliers (102)

31-614-CAS-39216783

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

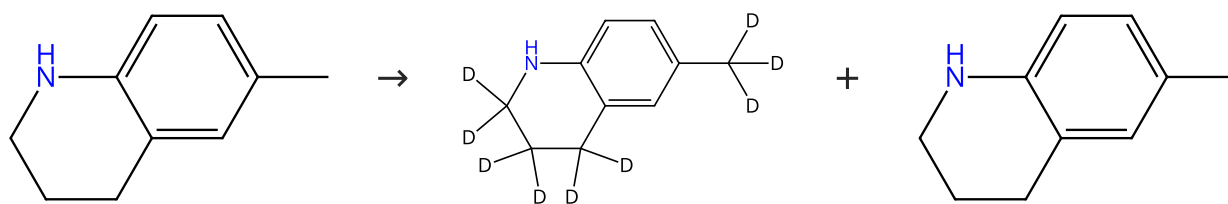
Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

Experimental Protocols

Scheme 42 (1 Reaction)

Steps: 1



Suppliers (80)

31-614-CAS-39216779

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

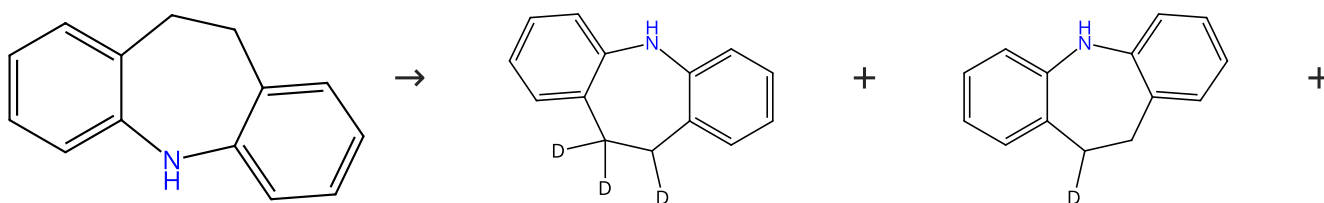
Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

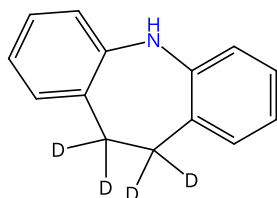
Experimental Protocols

Scheme 43 (1 Reaction)

Steps: 1



Suppliers (104)



31-614-CAS-39216768

Steps: 1

**Palladium Nanoparticles for the Deuteration and Tritiation of Benzylic Positions on Complex Molecules**

By: Pfeifer, Viktor; et al

Angewandte Chemie, International Edition (2021), 60(51), 26671-26676.

1.1 Reagents: Deuterium

Catalysts: Palladium

Solvents: Dimethylacetamide; 20 h, 1.1 bar, 50 °C

Experimental Protocols