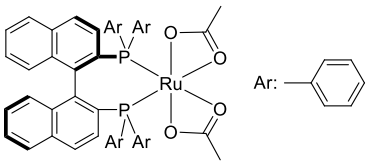
Ru(OAc)2 (diphosphine)

Ruthenium complex of BINAP and SEGPHOS® can afford high enantioselectivities in asymmetric hydrogenations of a wide range of olefins.

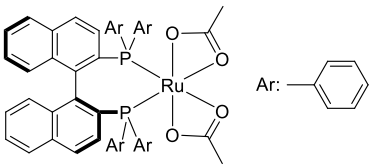
Ru(OAc)2[(R)-binap]

CAS No.	**325146-81-4**
Formula	**$C_{48}H_{38}O_4P_2Ru$**
M.W.	**841.87**



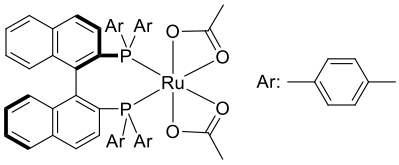
Ru(OAc)2[(S)-binap]

CAS No.	**261948-85-0**
Formula	**$C_{48}H_{38}O_4P_2Ru$**
M.W.	**841.87**



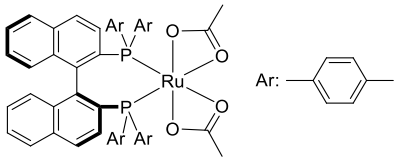
Ru(OAc)2[(R)-tolbinap]

CAS No.	**116128-29-1**
Formula	**$C_{52}H_{46}O_4P_2Ru$**
M.W.	**897.97**



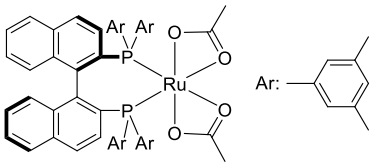
Ru(OAc)2[(S)-tolbinap]

CAS No.	**106681-15-6**
Formula	**$C_{52}H_{46}O_4P_2Ru$**
M.W.	**897.97**



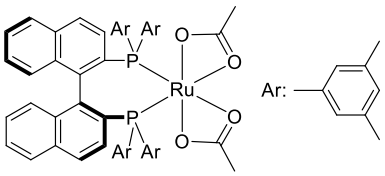
Ru(OAc)2[(R)-xylbinap]

CAS No.	**374067-50-2**
Formula	**$C_{56}H_{54}O_4P_2Ru$**
M.W.	**954.09**



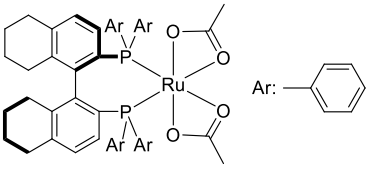
Ru(OAc)2[(S)-xylbinap]

CAS No.	**374067-49-9**
Formula	**$C_{56}H_{54}O_4P_2Ru$**
M.W.	**954.09**



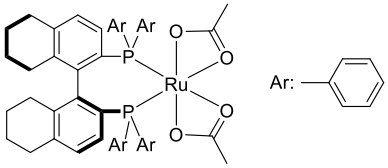
Ru(OAc)2[(R)-H8-binap]

CAS No.	**374067-51-3**
Formula	**$C_{48}H_{46}O_4P_2Ru$**
M.W.	**849.94**



Ru(OAc)2[(S)-H8-binap]

CAS No.	**142962-95-6**
Formula	**$C_{48}H_{46}O_4P_2Ru$**
M.W.	**849.94**



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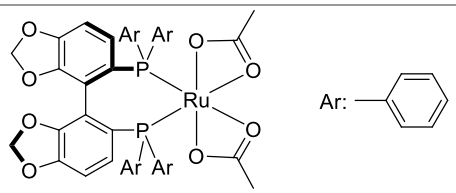
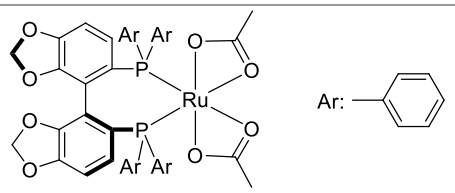
Ru(OAc)2[(R)-segphos®]

CAS No.	**944450-48-0**
Formula	**$C_{42}H_{34}O_8P_2Ru$**
M.W.	**829.77**



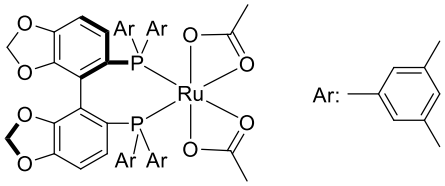
Ru(OAc)2[(S)-segphos®]

CAS No.	**373650-12-5**
Formula	**$C_{42}H_{34}O_8P_2Ru$**
M.W.	**829.77**



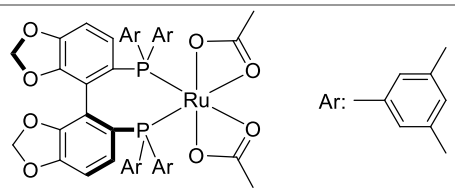
Ru(OAc)2[(R)-dm-segphos®]

CAS No.	**944450-49-1**
Formula	**$C_{50}H_{50}O_8P_2Ru$**
M.W.	**941.99**



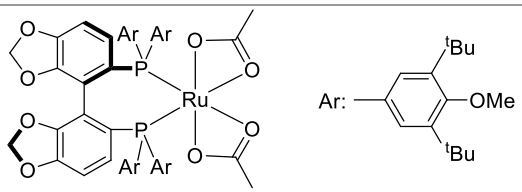
Ru(OAc)2[(S)-dm-segphos®]

CAS No.	**944450-50-4**
Formula	**$C_{50}H_{50}O_8P_2Ru$**
M.W.	**941.99**



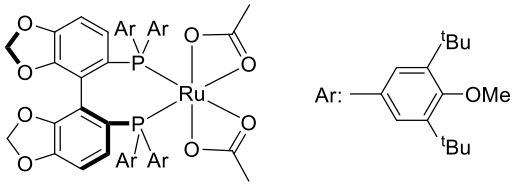
Ru(OAc)2[(R)-dtbm-segphos®]

CAS No.	**1025477-38-6**
Formula	**$C_{78}H_{106}O_{12}P_2Ru$**
M.W.	**1398.71**



Ru(OAc)2[(S)-dtbm-segphos®]

CAS No.	**1025476-84-9**
Formula	**$C_{78}H_{106}O_{12}P_2Ru$**
M.W.	**1398.71**



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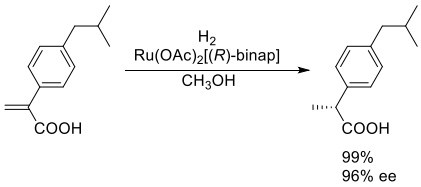
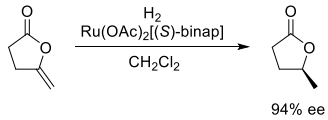
Tech Note

1 Asymmetric Hydrogenation of α, β-Unsaturated Carboxylic Acids



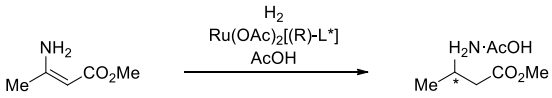
Takaya, H. *J. Org. Chem.* **1996**, *61*, 5510.
doi: 10.1021/jo960426p

2 Asymmetric Hydrogenation of α, β-Unsaturated Lactones



Takaya, H. *J. Org. Chem.* **1995**, *60*, 357.
doi: 10.1021/jo00107a014

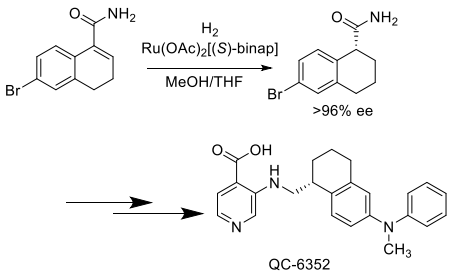
3 Asymmetric Hydrogenation of β-Enamine Esters



Matsumura, K. *Org. Process Res. Dev.*, **2011**, *15*, 1130–1137.
doi: 10.1021/op2001035
JP4368632B, US7015348B, US7893296B, EP1386901B
(Takasago)

4 Application

4.1 Synthesis of QC-6352



Chen, Y. K *ACS Med. Chem. Lett.*, **2017**, 8, 869.
doi. 10.1021/acsmedchemlett.7b00220

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