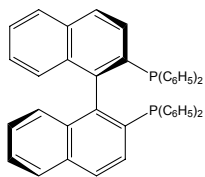


BINAP Ligand Kit - Manufactured under license of Takasago patents.

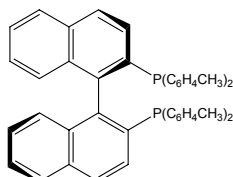
96-6950 Takasago BINAP Ligand Kit – Contains 250mg unit of the 6 ligands listed below.



250mg
1g
5g

15-0150 (R)-(+)-2,2'-Bis(diphenyl-phosphino)-1,1'-binaphthyl, 98% (R)-(+)-BINAP [76189-55-4]

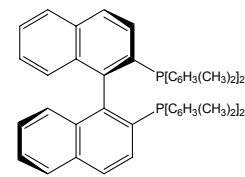
15-0151 (S)-(-)-2,2'-Bis(diphenyl-phosphino)-1,1'-binaphthyl, 97% (S)-(-)-BINAP [76189-56-5]



250mg
1g
5g

15-0152 (R)-(+)-2,2'-Bis(di-p-tolyl-phosphino)-1,1'-binaphthyl, 98% (R)-(+)-Tol-BINAP [99646-28-3]

15-0153 (S)-(-)-2,2'-Bis(di-p-tolyl-phosphino)-1,1'-binaphthyl, 98% (S)-(-)-TolBINAP [100165-88-6]



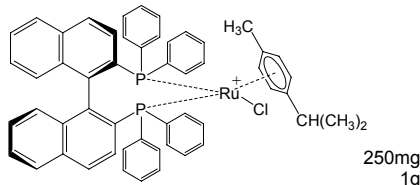
250mg
1g
5g

15-0476 (R)-(+)-2,2'-Bis(di(3,5-xylyl) phosphino)-1,1'-binaphthyl, 98% (R)-(+)-Xylyl-BINAP [137219-86-4]

15-0477 (S)-(-)-2,2'-Bis(di(3,5-xylyl) phosphino)-1,1'-binaphthyl, 98% (S)-(-)-XylylBINAP [135139-00-3]

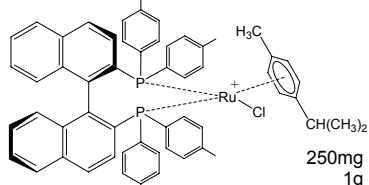
BINAP Ru Cymene Catalyst Kit - Manufactured under license of Takasago patents.

96-6951 Takasago BINAP Ru Cymene Catalyst Kit - Contains 250mg unit of the 6 catalysts listed below.



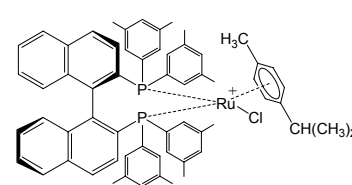
250mg
1g
5g

44-0084 Chloro[(R)-(+)-2,2'-bis(diphenyl-phosphino)-1,1'-binaphthyl](p-cymene) ruthenium(II) chloride [RuCl(p-cymene)((R)-binap)]Cl [145926-28-9]



250mg
1g
5g

44-0088 Chloro[(R)-(+)-2,2'-bis(di-p-tolyl-phosphino)-1,1'-binaphthyl](p-cymene) ruthenium(II) chloride [RuCl(p-cymene)((R)-tolbinap)]Cl [131614-43-2]



250mg
1g
5g

44-0092 Chloro[(R)-(+)-2,2'-Bis(di(3,5-xylyl)phosphino)-1,1'-binaphthyl](p-cymene)ruthenium(II) chloride [RuCl(p-cymene)((R)-xybinap)]Cl [944451-24-5]

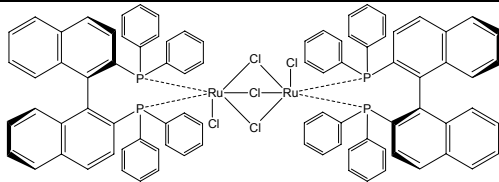
44-0086 Chloro[(S)-(-)-2,2'-bis(diphenyl-phosphino)-1,1'-binaphthyl](p-cymene) ruthenium(II) chloride [RuCl(p-cymene)((S)-binap)]Cl [130004-33-0]

44-0089 Chloro[(S)-(-)-2,2'-bis(di-p-tolylphosphino)-1,1'-binaphthyl](p-cymene)ruthenium(II) chloride [RuCl(p-cymene)((S)-tolbinap)]Cl [228120-95-4]

44-0093 Chloro[(S)-(-)-2,2'-bis(di(3,5-xylyl)phosphino)-1,1'-binaphthyl](p-cymene)ruthenium(II) chloride [RuCl(p-cymene)((S)-xybinap)]Cl [944451-25-6]

BINAP Ru Dimer Catalyst Kit - Manufactured under license of Takasago patents.

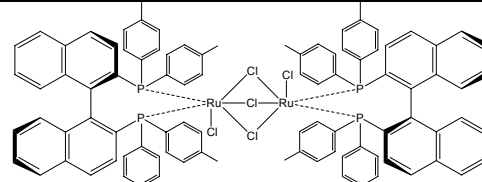
96-6952 Takasago BINAP Ru Dimer Catalyst Kit - Contains the 250mg unit of the 6 catalysts listed below.



250mg
1g
5g

44-0510 Dimethylammonium dichlorotri(μ-chloro)bis[(R)-(+)-2,2'-bis(diphenyl-phosphino)-1,1'-binaphthyl]diruthenate(II) [NH₂Me₂][{RuCl((R)-binap)}₂(μ-Cl)₃] [199684-47-4]

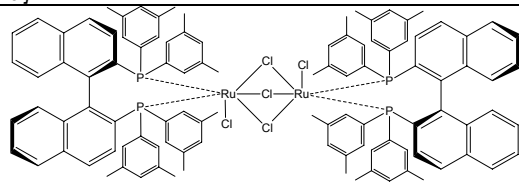
44-0511 Dimethylammonium dichlorotri(μ-chloro)bis[(S)-(-)-2,2'-bis(diphenyl-phosphino)-1,1'-binaphthyl]diruthenate(II) [NH₂Me₂][{RuCl((S)-binap)}₂(μ-Cl)₃] [199541-17-8]



250mg
1g
5g

44-0512 Dimethylammonium dichlorotri(μ-chloro)bis[(R)-(+)-2,2'-bis(di-p-tolylphosphino)-1,1'-binaphthyl]diruthenate(II) [NH₂Me₂][{RuCl((R)-tolbinap)}₂(μ-Cl)₃] [749935-02-2]

44-0513 Dimethylammonium dichlorotri(μ-chloro)bis[(S)-(-)-2,2'-bis(di-p-tolylphosphino)-1,1'-binaphthyl]diruthenate(II) [NH₂Me₂][{RuCl((S)-tolbinap)}₂(μ-Cl)₃] [309735-86-2]



250mg
1g
5g

44-0514 Dimethylammonium dichlorotri(μ-chloro)bis[(R)-(+)-2,2'-bis(di(3,5-xylyl)phosphino)-1,1'-binaphthyl]diruthenate(II) [NH₂Me₂][{RuCl((R)-xybinap)}₂(μ-Cl)₃] [944451-08-5]

44-0515 Dimethylammonium dichlorotri(μ-chloro)bis[(S)-(-)-2,2'-bis(di(3,5-xylyl)phosphino)-1,1'-binaphthyl]diruthenate(II) [NH₂Me₂][{RuCl((S)-xybinap)}₂(μ-Cl)₃] [944451-10-9]

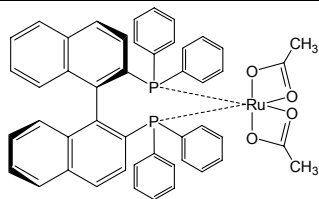
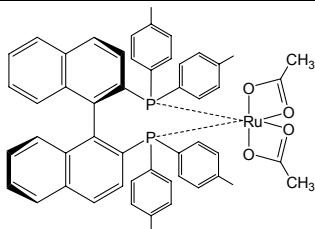
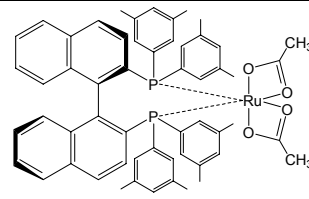
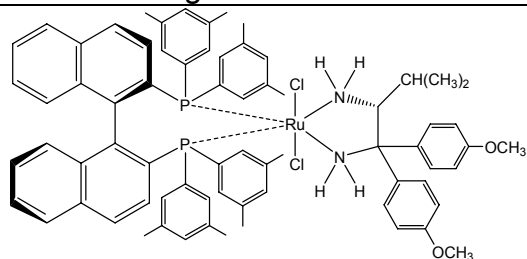
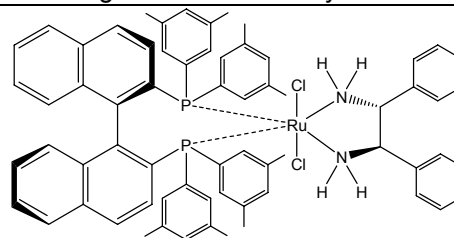
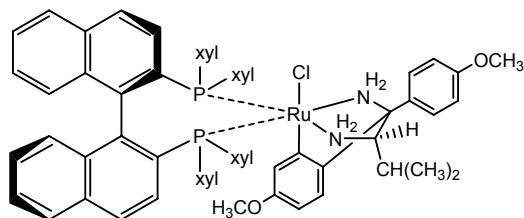
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BINAP Ru Acetate Catalyst Kit - Manufactured under license of Takasago patents.**96-6953 Takasago BINAP Ru Acetate Catalyst Kit - Contains 250mg unit of the 6 catalysts listed below.**250mg
1g
5g**44-0152** Diacetate[(R)-(+)-2,2'-bis(di-phenylphosphino)-1,1'-binaphthyl] ruthenium(II) Ru(OAc)₂[(R)-binap] [325146-81-4]250mg
1g
5g**44-0162** Diacetato[(R)-(+)-2,2'-bis(di-p-tolylphosphino)-1,1'-binaphthyl] ruthenium(II) Ru(OAc)₂[(R)-tolbinap] [116128-29-1]250mg
1g
5g**44-0164** Diacetato{(R)-(+)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}ruthenium(II) Ru(OAc)₂[(R)-xybinap] [374067-50-2]**44-0153** Diacetato[(S)-(-)-2,2'-bis(di-phenylphosphino)-1,1'-binaphthyl] ruthenium(II) Ru(OAc)₂[(S)-binap] [261948-85-0]**44-0163** Diacetato[(S)-(-)-2,2'-bis(di-p-tolylphosphino)-1,1'-binaphthyl] ruthenium(II) Ru(OAc)₂[(S)-tolbinap] [106681-15-6]**44-0165** Diacetato{(S)-(-)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}ruthenium(II) Ru(OAc)₂[(S)-xybinap] [374067-49-9]**BINAP Ru Diammine Catalyst Kit - Manufactured under license of Takasago patents.****96-6954 Takasago BINAP Ru Diammine Catalyst Kit - Contains 250mg unit of the 6 catalysts listed below.**250mg
1g
5g**44-0212** Dichloro{(R)-(+)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}[(2R)-(-)-1,1-bis(4-methoxyphenyl)-3-methyl-1,2-butanediamine]ruthenium(II) RuCl₂[(R)-xybinap][(R)-daipen] [220114-32-9]250mg
1g
5g**44-0226** Dichloro{(R)-(+)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}[(1R,2R)-(+)-1,2-diphenylethylenediamine]ruthenium(II) RuCl₂[(R)-xybinap][(R,R)-dpem] [220114-38-5]**44-0213** Dichloro{(S)-(-)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}[(2S)-(+)-1,1-bis(4-methoxyphenyl)-3-methyl-1,2-butanediamine]ruthenium(II) RuCl₂[(S)-xybinap][(S)-daipen] [220114-01-2]**44-0224** Dichloro{(S)-(-)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}[(1S,2S)-(-)-1,2-diphenylethylenediamine]ruthenium(II) RuCl₂[(S)-xybinap][(S,S)-dpem] [220114-03-4]250mg
1g
5g**44-0217** Chloro{(R)-(+)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}[(2R)-(-)-1-(4-methoxyphenyl)-1'-(4-methoxyphenyl-kC)-3-methyl-1,2-butanediamine]ruthenium(II) (R)-RUCY™-XylBINAP**44-0218** Chloro{(S)-(-)-2,2'-bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl}[(2S)-(+)-1-(4-methoxyphenyl)-1'-(4-methoxyphenyl-kC)-3-methyl-1,2-butanediamine]ruthenium(II) (S)-RUCY™-XylBINAP [1312713-89-5]Visit www.strem.com for new product information and searchable catalog.

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