

Our expertise in homogeneous catalysis supports the development of efficient and sustainable solutions to improve your catalytic processes. As a cost-effective alternative to *in situ* and advanced cross-coupling systems, the DyadPalladate[™] pre-catalysts exhibit comparable performance, simplify product purification, and offer a greener alternative to traditional cross-coupling catalysts. These novel catalysts are available as a kit or for individual sale in up to multi-kilogram quantities.

DyadPalladate[™] pre-catalyst kit – HMK-005 (1 gram each)

Catalog ID	Description/CAS#		Catalog ID	Description/CAS#	
Pd-192	[HXPhos] ₂ [Pd ₂ Cl ₆] CAS# 2548904-04-5	Pr P	Pd-197	[HtBuBrettPhos] ₂ [Pd ₂ Cl ₆] CAS# 2548904-09-0	MeO H PtBu ₂ CI CI CI Pd CI
Pd-193	[HRuPhos] ₂ [Pd ₂ Cl ₆] CAS# 2548904-00-1	$\begin{bmatrix} \mathbf{H} \\ \mathbf{P}_{C,Y_2} \\ \mathbf{O}_{i} \mathbf{P}_{T} \\ \mathbf{D}_{i} \mathbf{P}_{T} \end{bmatrix}_{2} \begin{bmatrix} \mathbf{C}_{1} & \mathbf{C}_{1} & \mathbf{C}_{1} \\ \mathbf{C}_{1} & \mathbf{C}_{1} & \mathbf{C}_{1} \end{bmatrix}$	Pd-201	[HPCy ₃] ₂ [Pd ₂ Cl ₆] CAS# 2548904-13-6	
Pd-194	[HSPhos] ₂ [Pd ₂ Cl ₆] CAS# 2548904-02-3	MeO OMe [CI Pd CI Pd CI]	Pd-202	[HP(tBU) ₃] ₂ [Pd ₂ CI ₆] CAS# 2548904-14-7	[
Pd-195	[HBrettPhos] ₂ [Pd ₂ Cl ₆] CAS# 2548904-08-9	MeO H PCy 2 Pd CI Pd CI	Pd-203	[HP(nBu)(Ad) ₂] ₂ [Pd ₂ Cl ₆] CAS# 2548904-17-0	
Pd-196	[HtBuXPhos] ₂ [Pd ₂ Cl ₆] CAS# 2548904-05-6	Pr Pr J CI Pd CI			

Suzuki model reaction

Pre-catalyst	Catalog ID	Conversion (%)	Yield (%)
(XPhos)Pd(crotyl)Cl	Pd-170	>99	99
XPhos G3 palladacycle	BPC-301	>99	98
[HXPhos] ₂ [Pd ₂ Cl ₆]	Pd-192	>99	97
Pd(OAc) ₂ + XPhos	Pd-111 + XPhos	94	90
Pd ₂ dba ₃ + XPhos	Pd-94 + XPhos	<1	<1

Initial studies indicate similar performance to other advanced pre-catalysts in a variety of cross-coupling reactions, including Suzuki couplings, Heck reactions, and Buchwald-Hartwig aminations.

