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 $\label{eq:catalog problem} \text{Catalog \# 07-6335} \qquad \text{(N-[3,5-Bis(trifluoromethyl)phenyl]-N'-[(1S,2S)-2-[(11bR)-3,5-dihydro-4H-dinaphth[2,1-c:1',2'-e]azepin-4-yl]cyclohexyl]thiourea, 98\%, (99\% ee)}$

Technical Notes:

- Michael Addition to promote enantioselective Michael reaction between 1,3-dicarbonyl compounds and nitro olefins
- 2. Spirocyclopentaneoxindoles with four contiguous stereocenters including one spiroquaternary stereocenter are synthesized by a combined Ru-catalyzed cross-metathesis/organocatalyzed asymmetric double-Michael addition.
- 3. Catalytic enantioselective conjugate addition reaction of α-fluoro-β-ketoesters to nitroalkenes.
- 4. Catalytic enantioselective electrophilic α-hydrazination promoted by chiral bifunctional organocatalysts.
- 5. Catalytic enantioselective Mannich reaction promoted by chiral bifunctional organocatalysts.

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