Strem Chemicals, Inc.

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Catalog # 07-1356 3-[[(1R,2R)-2-(1-Piperidinyl)cyclohexyl]amino]-4-[[4-(trifluoromethyl)phenyl]amino]-3-cyclobutene-1,2-dione, 98%, (99% ee)

Technical Notes:

- Michael Addition- highly enantioselective Michael addition reaction of diphenyl phosphite to a range of nitroalkenes.
- 2. Hydrophosphonylation- diphenylphosphite has been successfully employed in a chiral Pudovik reaction with aldehydes, extending the generality of this asymmetric methodology.
- 3. Friedel-Crafts/Substitution Domino Reaction- Dihydroarylfuran skeletons are efficiently synthesized from (Z)-bromonitroalkenes and naphthol derivatives in good yields and excellent enantioselectivities

$$R = \text{alkyl or aryl} + HP(OPh)_2 \xrightarrow{\text{CH}_2\text{Cl}_2, \text{ OC}} + HP(OPh)_2 \xrightarrow{\text{NO}_2} + HP(OPh$$

References:

- 1. Angew. Chem. Int. Ed., 2010, 49, 153-156.
- 2. Org. Biomol. Chem., 2014, 12, 1258-1264.
- 3. Angew. Chem. Commun., 2013, 49, 2001-2003.