Strem Chemicals, Inc.

strem.com

Catalog # 07-6344 N-[3,5-Bis(trifluoromethyl)phenyl]-N'-[(1R,2R)-2-(dimethylamino)-1,2-diphenylethyl]thiourea, 95%, (99% ee)

$$Ph$$
 Ph S CF_3 Me_2N HN HN CF_3

Technical Notes:

- 1. Michael Addition- highly enantioselective catalysts for the Michael addition of α-substituted cyanoacetates to vinyl sulfones, giving an efficient protocol for the construction of an all-carbon substituted quaternary stereocentre.
- 2. Asymmetric catalysis of chiral oxindoles bearing 3-position all-carbon quaternary stereocenters.
- 3. The enantioselective Michael addition of dialkyl phosphites to N-unprotected isatylidene malononitriles.
- 4. Aldol Reaction- The first example of a direct catalytic asymmetric intermolecular aldol reaction of 3-isothiocyanato oxindoles to simple ketones.
- 5. Cascade Aldol-Cyclization- A highly efficient method for the construction of a family of spiro[oxazolidine-2-thione-oxindoles] with 3-isothiocyanato oxindoles and aldehydes via a cascade aldol-cyclization.

$$R = \text{aryl } R^1 = H$$
For R = aryl R¹ = SO₂Ph
$$R^1 = \text{SO}_2Ph$$

Strem Chemicals, Inc.

strem.com

References:

- 1. Org. Biomol. Chem., 2006, 4, 2097-2099.
- 2. Org. Biomol. Chem., 2010, 8, 77-82.
- 3. Tetrahedron, **2014**, 70, 2406-2415.
- 4. Org. Lett., 2011, 13, 2472-2475.
- 5. Tetrahedron, 2013, 69, 5281-5286.