Strem Chemicals, Inc.

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Catalog # 07-0956 (2S)-2-[[[(1R,2R)-2-Aminocyclohexyl]amino]thioxomethyl]amino]-N,3,3-trimethyl-N-(phenylmethyl)butanamide

Technical Notes:

- 1. **Conjugate Addition:** Primary amine-thiourea derivative is an active and highly enantioselective catalyst for the conjugate addition of ketones to nitroalkenes.
- 2. **Michael Addition**: The asymmetric Michael addition of dioxindoles to β-substituted nitroalkenes is reported. The bifunctional primary amine-thiourea, by means of a non-covalent-based mode of catalysis, secures direct access to 3-substituted 3-hydroxyoxindole derivatives with high stereocontrol.

R1 NO₂ + R² R3 Catalyst O₂N R1 O₂N R6. (1) Ref. (1)
$$R^{2} \longrightarrow R^{3} \longrightarrow R^{4} \longrightarrow$$

References:

- 1. J. Am. Chem. Soc., 2006, 128, 7170-7171.
- 2. Chem. Commun., 2012, 48, 3336-3338.