

Certificate of Analysis

Product Name: Tranylcypromine hydrochloride

Catalog No.: 3852

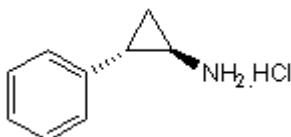
Batch No.: 3

CAS Number: 1986-47-6

IUPAC Name: (\pm)-*trans*-2-Phenylcyclopropylamine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₉H₁₁N.HCl
Batch Molecular Weight: 169.65
Physical Appearance: White solid
Solubility: water to 100 mM
 DMSO to 100 mM
Storage: Desiccate at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	63.72	7.13	8.26
Found	63.42	6.97	8.29

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Tranylcypromine hydrochloride

Catalog No.: 3852

Batch No.: 3

CAS Number: 1986-47-6

IUPAC Name: (\pm)-*trans*-2-Phenylcyclopropylamine hydrochloride

Description:

Irreversible inhibitor of lysine-specific demethylase 1 (LSD1/BHC110) and monoamine oxidase (MAO). Inhibits histone demethylation. In combination with CHIR 99021 (Cat. No. 4423), enables reprogramming of mouse embryonic fibroblasts transduced by only two factors, Oct4 and Klf4, into induced pluripotent stem (iPS) cells.

Physical and Chemical Properties:

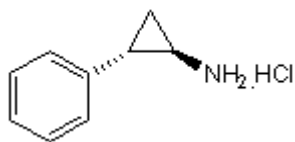
Batch Molecular Formula: C₉H₁₁N.HCl

Batch Molecular Weight: 169.65

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Li *et al* (2009) Generation of human-induced pluripotent stem cells in the absence of exogenous Sox2. *Stem Cells* **27** 2992. PMID: 19839055.

Schmidt and McCafferty (2007) *trans*-2-Phenylcyclopropylamine is a mechanism-based inactivator of the histone demethylase LSD1. *Biochemistry* **46** 4408. PMID: 17367163.

Lee *et al* (2006) Histone H3 lysine 4 demethylation is a target of nonselective antidepressive medications. *Chem.Biol.* **13** 563. PMID: 16793513.

Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956