Print Date: Dec 23rd 2021

Certificate of Analysis

www.tocris.com

Product Name: **Tranylcypromine hydrochloride** **Catalog No.: 3852** **Batch No.: 3**

CAS Number: 1986-47-6

IUPAC Name: (±)-*trans*-2-Phenylcyclopropylamine hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_9H_{11}N.HCl$

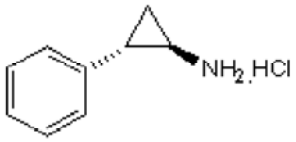
Batch Molecular Weight: 169.65

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 98.9% purity

^{1}H 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

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Description:

Tranylcypromine hydrochloride is an 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. For more information about how Tranylcypromine hydrochloride may be used, see our protocol: Highly Efficient Generation of CiPSCs from MEFs Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

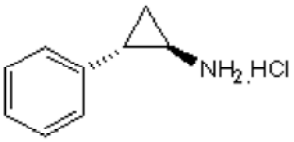
Batch Molecular Formula: $C_9H_{11}N.HCl$

Batch Molecular Weight: 169.65

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



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.

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.

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