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# DATASHEET

## Tranlycypromine hydrochloride

### Product overview

<b>Name</b>	Tranlycypromine hydrochloride
<b>Cat No</b>	HB1412
<b>Description</b>	LSD1 / MAO inhibitor. Enables reprogramming of mouse embryonic fibroblasts into iPS cells.
<b>Alternative names</b>	trans-2-phenylcyclopropylamine; 2-PCPA; Parnate
<b>Biological action</b>	Inhibitor
<b>Purity</b>	>98%

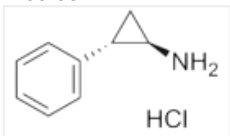
### Biological Data

<b>Biological description</b>	Lysine-specific demethylase 1 (LSD1) and monoamine oxidase (MAO) inhibitor ( $IC_{50} = < 2 \mu M$ for LSD1). Irreversible inhibition of LSD1, inhibits H3K4 demethylation. Enables reprogramming of mouse embryonic fibroblasts into iPS cells. Shows antidepressant actions.
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### Solubility & Handling

<b>Storage instructions</b>	room temperature (desiccate)
<b>Solubility overview</b>	Soluble in water (100mM) or DMSO (100mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

<b>Chemical name</b>	(±)-trans-2-Phenylcyclopropylamine hydrochloride
<b>Molecular Weight</b>	169.65
<b>Chemical structure</b>	 <p>The chemical structure shows a benzene ring attached to a cyclopropyl ring. The cyclopropyl ring has an amino group (-NH<sub>2</sub>) attached to the carbon adjacent to the benzene ring. The structure is labeled as HCl, indicating it is the hydrochloride salt.</p>
<b>Molecular Formula</b>	C <sub>9</sub> H <sub>11</sub> N.HCl
<b>CAS Number</b>	1986-47-6
<b>PubChem identifier</b>	2723716
<b>SMILES</b>	N[C@H]1[C@H]([C@]2=CC=CC=C2)C1.Cl
<b>InChiKey</b>	ZPEFMSTTZXJOTM-OULXEKPRSA-N

### References

**trans-2-Phenylcyclopropylamine is a mechanism-based inactivator of the histone demethylase LSD1.**

Schmidt DM *et al* (2007) *Biochemistry* 46(14)  
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**Histone H3 lysine 4 demethylation is a target of nonselective antidepressive medications.**

Lee MG *et al* (2006) *Chem Biol* 13(6)

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16793513

**Generation of human-induced pluripotent stem cells in the absence of exogenous Sox2.**

Li W *et al* (2009) *Stem Cells* 27(12)

PubMedID

19839055

**Tranlycypromine: new perspectives on an 'old' drug.**

Frieling H *et al* (2006) *Eur Arch Psychiatry Clin Neurosci* 256(5)

PubMedID

16927039

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