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DATASHEET

Tranylcypromine hydrochloride

Product overview

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

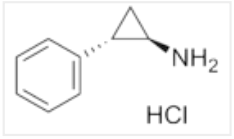
Biological Data

Biological description	Lysine-specific demethylase 1 (LSD1) and monoamine oxidase (MAO) inhibitor (IC_{50} = < 2 µM for LSD1). Irreversible inhibition of LSD1, inhibits H3K4 demethylation. Enables reprogramming of mouse embryonic fibroblasts into iPS cells. Shows antidepressant actions.

Solubility & Handling

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

Chemical Data

Chemical name	(±)-*trans*-2-Phenylcyclopropylamine hydrochloride
Molecular Weight	169.65
Chemical structure	
Molecular Formula	$C_9H_{11}N.HCl$
CAS Number	1986-47-6
PubChem identifier	2723716
SMILES	N[C@H]1[C@H]([C@]2=CC=CC=C2)C1.Cl
InChiKey	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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Li W *et al* (2009) Stem Cells 27(12)
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Frieling H *et al* (2006) Eur Arch Psychiatry Clin Neurosci 256(5)
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