Tranylcypromine hydrochloride (2-PCPA), Irreversible monoamine oxidase (MAO) inhibitor ab120606

Overview

Product name: Tranylcypromine hydrochloride (2-PCPA), Irreversible monoamine oxidase (MAO) inhibitor

Description: Irreversible monoamine oxidase (MAO) inhibitor

Biological description: Irreversible monoamine oxidase (MAO) inhibitor. Increases serotonergic, noradrenergic activity and augments dopamine transmission. Additionally inhibits LSD1 (BHC110), inhibiting histone demethylation (IC$_{50}$ = >50 μM). Anticonvulsant and antidepressant.

Purity: > 97%

CAS Number: 1986-47-6

Chemical structure:

![Chemical structure](image)

Properties

Chemical name: (±)-trans-2-Phenylcyclopropylamine hydrochloride

Molecular weight: 169.65

Molecular formula: C$_9$H$_{11}$N.HCl

PubChem identifier: 2723716

Storage instructions: Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.

Solubility overview: Soluble in water to 100 mM

Handling:

Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.

SMILES: C1[+H][[C@@H]1N]C2=CC=CC2.Cl

Source: Synthetic
MCF7 cells were incubated at 37°C for 24h with vehicle control (0 µM) and different concentrations of tranylcypromine hydrochloride (ab120606). Increased expression of Histone 3 K4 di-methyl (ab7766) in MCF7 cells correlates with an increase in tranylcypromine hydrochloride concentration, as described in literature.

Nuclear extracts were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10 µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with ab7766 at 1 µg/ml and ab1791 at 1 µg/ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (ab97051) at 1/10000 dilution and visualised using ECL development solution.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS"
Abcam biochemist are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team.