

## Tranylcypromine (2-PCPA), hemisulfate salt

Catalog #: 27305

**Lot #:** 160429

**Size:** 100 mg

Structure:

CAS Registry #: 13492-01-8

**Purity: >98%** 

Chemical Formula: C<sub>18</sub>H<sub>22</sub>N<sub>2</sub>·H<sub>2</sub>SO<sub>4</sub>

Molecular Weight: 364.46

**Description:** Tranylcypromine (2-PCPA) is an irreversible inhibitor of LSD1 histone demethylase and monoamine oxidases (MAO). The inhibitor targets monoamine oxidases A and B and has been used as a chemical scaffold to design new demethylase inhibitors. Tranylcypromine has been shown to increase Histone H3 lysine 4 (H3K4) methylation in P19 embryonal carcinoma cell.

**Appearance:** A white to off-white powder

**Solubility:** Soluble in water (25 mg/ml).

**Biological Activity:** Tranylcypromine inhibits LSD1 with an IC<sub>50</sub> value of 20.7  $\mu$ M and a K<sub>i</sub> value of 242.7  $\mu$ M. It also irreversibly inhibits MAO A and MAO B with IC<sub>50</sub> values of 2.3 and 0.95  $\mu$ M and K<sub>i</sub> values of 101.9 and 16  $\mu$ M, respectively.

**Storage/Stability:** Store solid form at +4°C. Hygroscopic. Solid form is stable at least 12 months from date of receipt, when stored as directed. Aqueous solutions are less stable; we recommend preparing and using stock solutions the same day.

Warnings: Hygroscopic. Protect from moisture. Protect from light.

**Quality Control:** The purity was determined by HPLC analysis.

## Reference(s):

1. Schmidt, D.M.Z., and McCafferty, D.G. Biochemistry 46:4408-4416 (2007).

2. Yang, M., et al. Biochemistry 46:8058-65(2007).