

## Paxilline

Cat. #: P-450

**Origin:** Isolated from *Penicillium paxilli*.

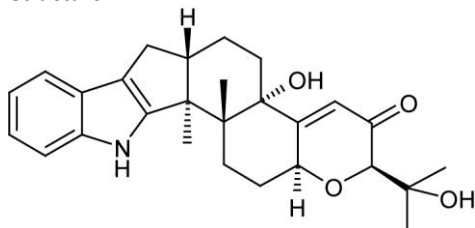
**Source description:** Natural.

**M.W.:** 435.6 daltons.

**Purity:** >98%.

**Effective concentration:** 10-100 nM.

**Structure:**



**Chemical name:** (2R,4bS,6aS,12bS,12cR,14aS)-5,6,6a,7,12,12b,12c,13,14,14a-Decahydro-4b-hydroxy-2-(1-hydroxy-1-methylethyl)-12b,12c-dimethyl-2H-pyrano[2'',3'':5',6']benz[1',2':6,7]indeno[1,2-b]indol-3(4bH)-one.

**Molecular formula:** C<sub>27</sub>H<sub>33</sub>NO<sub>4</sub>.

**CAS No.:** 57186-25-1.

**Activity:** Paxilline is a selective blocker of high-conductance Ca<sup>2+</sup>-activated (Maxi-K) K<sup>+</sup> channels.

**Sizes:** 0.45 mg or 5 x 0.45 mg lyophilized powder.

**Storage before reconstitution:** Lyophilized powder can be stored intact at room temperature for several weeks. For longer periods, it should be stored at -20°C.

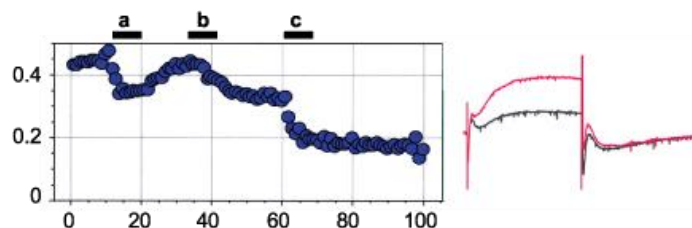
**Reconstitution:** DMSO or Acetone. Centrifuge all product preparations before use (10000 x g 5 min).

**Concentration after reconstitution:** Dissolving 0.45 mg in 1 ml gives a stock solution of 1 mM.

**Storage and stability after reconstitution:** Up to one week at 4°C or three months at -20°C.

**Protect from light.**

**Bioassay:** Paxilline inhibits K<sub>Ca</sub>1.1 (BK) channels heterologously expressed in *Xenopus* oocytes.



Left: The effect of 100 nM **Paxilline** (#P-450) (a), **Penitrem A** (P-650) (b), and **Verruculogen** (#V-500) (c) on BK currents. Time course of current amplitude changes upon sequential application of the three toxins. Right: Example of current responses to 100 ms depolarization before (red) and during (black) perfusion of 500 nM Paxilline.