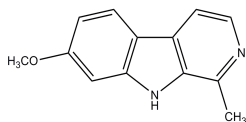


**PRODUCT: Harmine****ALTERNATE NAME:** 7-Methoxy-1-methyl-9*H*-pyrido[3,4-*b*]indole**CATALOG #:** 2561-50, 250**AMOUNT:** 50 mg, 250 mg**STRUCTURE:****MOLECULAR FORMULA:** C<sub>13</sub>H<sub>12</sub>N<sub>2</sub>O**MOLECULAR WEIGHT:** 212.25**CAS No.** 442-51-3**APPEARANCE:** White to off-white solid**SOLUBILITY:** DMSO (>20 mg/ml)**PURITY:** ≥98% by Titration**STORAGE:** Store at -20°C. Protect from light and air**DESCRIPTION:**

Harmine is a potent and specific inhibitor of both the kinase activity and autophosphorylation of tyrosine during translation (DYRK1A (IC<sub>50</sub>'s: DYRKA1A = 33 nM; DYRKA1B = 166 nM; DYRK2 = 1.9 μM; DYRK4 = 80 μM). Inhibits self-renewal and promotes differentiation of glioblastoma stem-like cells (GSLC's) possibly via inhibition of Akt phosphorylation. Selective competitive and reversible inhibitor of MAO-A (IC<sub>50</sub> = 8 μM). Also regulates PPAR $\gamma$  expression and displays antidiabetic activity.

**REFERENCES:**Gockler, N., *et al.* (2009). *FASEB J.* **276**, 6324-6337.**HANDLING:**

Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:**

EZSolution™ A 83-01, Sterile-Filtered (Cat. No. 1989-1)  
EZSolution™ CHIR99021, Sterile-Filtered (Cat. No. 1991-1)  
DiscoveryPak™ Stem Cell Fate Regulator Set I (Cat. No. K852-3)  
DiscoveryPak™ Stem Cell Fate Regulator Set II (Cat. No. K853-8)  
DiscoveryPak™ Stem Cell Fate Regulator Set III (Cat. No. K854-3)  
DiscoveryPak™ Stem Cell Fate Regulator Set IV (Cat. No. K855-3)  
DiscoveryPak™ Stem Cell Fate Regulator Set V (Cat. No. K865-5)  
DiscoveryPak™ Stem Cell Fate Regulator Set VI (Cat. No. K866-5)  
DiscoveryPak™ Stem Cell Fate Regulator Set VII (Cat. No. K866-10)  
(±) -Bay K 8644 (Cat. No. 1682-5)  
BIX01294 (Cat. No. 1678-5, 25)  
CHIR99021 (Cat. No. 1677-5, 25)  
EZSolution™ CHIR99021 (Cat. No. 1748-5)  
Pluripotin (Cat. No. 2165-1, 5)  
PD0325901 (Cat. No. 1643-2)  
EZSolution™ PD-0325901, Sterile-Filtered (Cat. No. 1990-1)  
PS-48 (Cat. No. 1869-5)  
Pyrintegrin (Cat. No. 1729-1,5)  
EZSolution™ Pyrintegrin (Cat. No. 1737-1)  
RepSox (Cat. No. 1894-5, 25)  
Reversine (Cat. No. 1851-1, 5)  
RG 108 (Cat. No. 1679-10,30)  
SB-431542 (Cat. No. 1674-1)  
EZSolution™ SB-431542 (Cat. No. 1872-1)  
EZSolution™ SB-431542, Sterile-Filtered (Cat. No. 1992-1)  
Sodium Butyrate (Cat. No. 1609-100, 1000)  
StemBoost™ Reprogramming Cocktail Set I (Cat. No. K869-1ML, 5ML, 1set)  
StemBoost™ Reprogramming Cocktail Set II (Cat. No. K870-1ML, 5ML, 1set)  
StemBoost™ YPAC Cocktail Set (Cat. No. K871-1ML, 5ML, 1set)  
Thiazovivin (Cat. No. 1681-1,5)  
EZSolution™ Thiazovivin (Cat. No. 1736-1)  
EZSolution™ Thiazovivin, Sterile-Filtered (Cat. No. 1993-1)  
Tranylcypromine Hemisulfate (Parnate) (Cat. No. 1816-25,100)  
Valproic Acid, Sodium Salt (Cat. No. 1647-200)  
Y-27632,2 HCl (Cat. No. 1596-1, 5, 50)  
EZSolution™ Y-27632, HCl (Cat. No. 1784-5)  
EZSolution™ Y-27632, HCl, Sterile-Filtered (Cat. No. 1994-1)

**USAGE:****FOR RESEARCH USE ONLY! Not to be used in humans.**