Inhibitors, Agonists, Screening Libraries

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Data Sheet

Product Name: Harmine
Cat. No.: HY-N0737A
CAS No.: 442-51-3
Molecular Formula: C_{13}H_{12}N_2O
Molecular Weight: 212.25
Target: 5-HT Receptor; Autophagy
Pathway: Autophagy; GPCR/G Protein; Neuronal Signaling
Solubility: DMSO: 10 mg/mL

BIOLOGICAL ACTIVITY:
Harmine, a tricyclic b-carboline alkaloid that was originally isolated from seeds of Peganum harmala, has been reported to possess anxiolytic, behavioral effects. IC50 value: 1.47μM (EC50) and 337.10μM (CC50) [3].
Target: 5-HT2A
In vitro: In the study, harmine negatively regulates HR but not NHEJ by interfering Rad51 recruitment, resulting in severe cytotoxicity in hepatoma cells. Furthermore, NHEJ inhibitor Nu7441 markedly sensitizes Hep3B cells to the anti-proliferative effects of Harmine [1].
In vivo: The present study demonstrated that administration of harmine significantly attenuated cerebral edema, and improved learning and memory ability [2].

PROTOCOL (Extracted from published papers and Only for reference)

Cell assay [1] Apoptosis of Hep3B cells caused by Harmine were analyzed by Annexin V-FITC Apoptosis Detection Kit (Biotool). Briefly, cells (1–5×10^5 per sample) were collected, washed twice with cold PBS, centrifuged, and resuspended in 100 ml 1×binding buffer. Annexin V-FITC and PI staining solution were then added. After incubation for 10 min in the dark, fluorescence was analyzed by FACSCalibur flow cytometer (BD Biosciences). Animal administration [2] The rats were randomly divided into three groups: Sham-operated group (sham; n=15); the TBI group (TBI; n=35) and the TBI + harmine (Beijing Aoboxing Biotechnology Co., Ltd., Beijing, China)-treated group (Harmine; n=35). Harmine was administered immediately following TBI (i.p, 30 mg/kg per day) for up to 5 days. The sham and TBI groups received equal volumes of 0.9% saline solution (i.p.).

References:

Caution: Product has not been fully validated for medical applications. For research use only.
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