Product Data Sheet

Product Name: Harmine hydrochloride
Cat. No.: GC38413

Chemical Properties

Cas. No.	343-27-1		
SMILES	CC1=NC=CC2=C1NC3=C2C=CC(OC)=C3.Cl		
Formula	$C_{13}H_{13}ClN_2O$	M.Wt	248.71
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Harmine hydrochloride		

Background

Peroxisome proliferator-activated receptor γ (PPARγ) is a central regulator of adipocyte differentiation and is the principle target of the thiazolidinedione (TZD) class of antidiabetic drugs.[1] Harmine is a β-carboline alkaloid that was first isolated from seeds of *Peganum harmala* (Syrian rue) and *Banisteriopsis caapi*. Recent work indicates that harmine is a unique regulator of PPARγ expression that acts by inhibiting the Wnt signalling pathway in a cell-specific manner.[2] Administration of harmine (30 mg/kg) to obese *db/db* mice resulted in reduced blood glucose, free fatty acids, and triglyceride levels, delayed hyperglycemia, and improved insulin sensitivity. Harmine also attenuates inflammatory gene expression (TNF-α, IL-1β, iNOS) and macrophage accumulation in adipose tissue.[2]

1.Hauner, H.The mode of action of thiazolidinedionesDiabetes Metab. Res. Rev.18(Suppl. 2)S10-S15(2002) 2.Waki, H., Park, K.W., Mitro, N., et al.The small molecule harmine is an antidiabetic cell-type-specific regulator of PPARγ expressionCell Metab.5(5)357-370(2007)

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA