Data Sheet (Cat.No.TMID-0801)

TargetMol

Vardenafil-D5 hydrochloride

Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Vardenafil-D5 hydrochloride is the deuterium-labeled version of Vardenafil hydrochloride (TMSM-2380). Vardenafil dihydrochloride is a highly selective and orally active phosphodiesterase 5 (PDE5) inhibitor, with an IC50 of 0.7 nM. It displays IC50 values of 180 nM and 11 nM for PDE1 and PDE6, respectively, while for PDE3 and PDE4, the IC50 is greater than 1000 nM. This compound non-competitively inhibits the hydrolysis of cyclic guanosine monophosphate (cGMP), leading to increased cGMP levels. Vardenafil dihydrochloride is useful for studying conditions such as erectile dysfunction, hepatitis, and diabetes.
Targets(IC50)	Endogenous Metabolite,PDE
In vivo	Vardenafil hydrochloride (IV; 0.03 mg/kg) enhances recovery in rats with cavernous nerve injury. Additionally, vardenafil hydrochloride (IV; 0.17 mg/kg, once daily for 7 days) offers hepatic protection against Con A-induced hepatitis and reduces NF- levels in liver tissue. Furthermore, vardenafil hydrochloride (oral; 10 mg/kg, once daily for 25 weeks) prevents the reduction of tissue cGMP levels and inhibits the increase of 3-NT production in ZDF hearts.