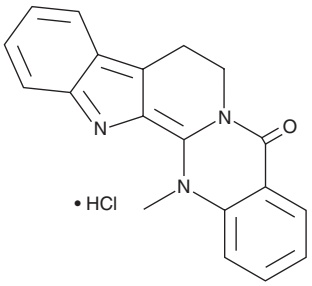
PRODUCT INFORMATION

Dehydroevodiamine (hydrochloride)

Item No. 25101

CAS Registry No.:	111664-82-5
Formal Name:	8,14-dihydro-14-methyl-indolo[2',3':3,4] pyrido[2,1-b]quinazolin-5(7H)-one, monohydrochloride
MF:	$C_{19}H_{15}N_3O \bullet HCl$
FW:	337.8
Purity:	≥98%
UV/Vis.:	λ_{max}: 248, 315, 367 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Euodiae fructus*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Dehydroevodiamine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the dehydroevodiamine (hydrochloride) in the solvent of choice. Dehydroevodiamine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of dehydroevodiamine (hydrochloride) in ethanol and DMF is approximately 2.5 mg/ml and approximately 12.5 mg/ml in DMSO.

Description

Dehydroevodiamine is an alkaloid that has been isolated from *E. rutaecarpa* and has anti-inflammatory, antiarrhythmic, hypotensive, and anti-amnesic biological activities.[1-4] It inhibits LPS-induced secretion of prostaglandin E_2 (PGE_2; Item No. 14010) in RAW 264.7 mouse macrophages when used at a concentration of 30 µM.[1] Dehydroevodiamine (0.1-0.3 µM) reduces the upstroke velocity, action potential amplitude, and contractile force of electrically-stimulated primary human atrial trabeculae.[2] *In vivo*, dehydroevodiamine (10 mg/kg) decreases mean arterial blood pressure (MAP) by approximately 30% in rats.[3] Dehydroevodiamine (1.5 mg/kg) also inhibits amnesia induced by amyloid-β (25-35) (Item No. 24155) and increases latency to step-through in a passive avoidance test in mice.[4]

References

1. Noh, E.J., Ahn, K.S., Shin, E.M., *et al.* Inhibition of lipopolysaccharide-induced iNOS and COX-2 expression by dehydroevodiamine through suppression of NF-κB activation in RAW 264.7 macrophages. *Life Sci.* **79(7)**, 695-701 (2006).
2. Loh, S.-H., Tsai, Y.-T., Lee, C.-Y., *et al.* Antiarrhythmic effects of dehydroevodiamine in isolated human myocardium and cardiomyocytes. *J. Ethnopharmacol.* **153(3)**, 753-762 (2014).
3. Yang, M.C.M., Wu, S.-L., Kuo, J.-S., *et al.* The hypotensive and negative chronotropic effects of dehydroevodiamine. *Eur. J. Pharmacol.* **182(3)**, 537-542 (1990).
4. Wang, H.-H., Chou, C.-J., Liao, J.-F., *et al.* Dehydroevodiamine attenuates β-amyloid peptide-induced amnesia in mice. *Eur. J. Pharmacol.* **413(2-3)**, 221-225 (2001).

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