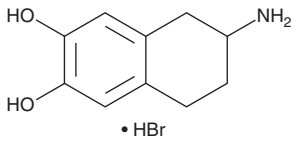
PRODUCT INFORMATION

(±)-2-Amino-6,7-dihydroxy-1,2,3,4-tetrahydronaphthalene (hydrobromide)

Item No. 23866

CAS Registry No.: 13575-86-5
Formal Name: 6-amino-5,6,7,8-tetrahydro-2,3-naphthalenediol, monohydrobromide
Synonyms: (±)-ADTN, 6,7-ADTN, 6,7-diOHATN, NSC 287353
MF: $C_{10}H_{13}NO_2 \bullet HBr$
FW: 260.1
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

(±)-2-Amino-6,7-dihydroxy-1,2,3,4-tetrahydronaphthalene (6,7-ADTN) is supplied as a solid. A stock solution may be made by dissolving the 6,7-ADTN in water. We do not recommend storing the aqueous solution for more than one day.

Description

6,7-ADTN is a dopamine receptor agonist (EC_{50}s = 3.5 and 0.65 µM in rat striatal and nucleus accumbens homogenates, respectively).[1] 6,7-ADTN stimulates production of cAMP in rat striatal homogenates, a process that is reduced by 70% in the presence of the dopamine antagonist fluphenazine (Item No. 23555) at a concentration of 1 µM. *In vivo*, 6,7-ADTN induces hyperlocomotion in rats when injected bilaterally at a dose of 100 nmol per side into the nucleus accumbens. It increases cAMP production and glycoprotein secretion in the albumen gland of *H. duryi* (snail).[2] It also reduces sucrose feeding in *R. maderae* (cockroach) nymphs.[3]

References

1. Woodruff, G.N., Watling, K.J., Andrews, C.D., *et al.* Dopamine receptors in rat striatum and nucleus accumbens; conformational studies using rigid analogues of dopamine. *J. Pharm. Pharmacol.* **29(7)**, 422-427 (1977).
2. Mukai, S.T., Kiehn, L., and Saleuddin, A.S.M. Dopamine stimulates snail albumen gland glycoprotein secretion through the activation of a D1-like receptor. *J. Exp. Biol.* **207(Pt 14)**, 2507-2518 (2004).
3. Allen, J.M., Van Kummer, B.H., and Cohen, R.W. Dopamine as an anorectic neuromodulator in the cockroach *Rhyparobia maderae*. *J. Exp. Biol.* **214(Pt 22)**, 3843-3849 (2011).

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