# 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 • HBr

HO

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  $\mu$ M in rat striatal and nucleus accumbens homogenates, respectively). 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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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