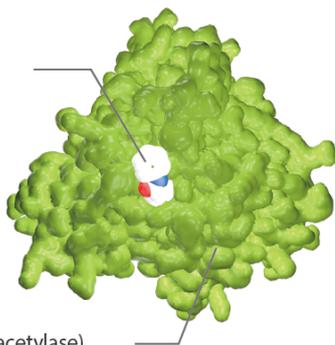


Dopamine β -hydroxylase

Dopamine beta-hydroxylase; Dopamine beta-monooxygenase; Dopamine β -monooxygenase

HDAC Inhibitor:
Vorinostat (SAHA)



HDAC (Histone deacetylase)

Dopamine β -hydroxylase (Dopamine beta-hydroxylase, Dopamine beta-monooxygenase) is an enzyme that in humans is encoded by the DBH gene. Dopamine β -monooxygenase catalyzes the chemical reaction with 3 substrates of 3,4-dihydroxyphenethylamine, ascorbate, and O_2 , whereas its 3 products are noradrenaline, dehydroascorbate, and H_2O . Dopamine β -hydroxylase belongs to the family of oxidoreductases, specifically those acting on paired donors, with O_2 as oxidant and incorporation or reduction of oxygen. Dopamine β -hydroxylase participates in tyrosine metabolism. Dopamine β -hydroxylase has 3 cofactors: copper, PQQ, and Fumarate. Dopamine β -hydroxylase is in the catecholamine biosynthetic pathway. Dopamine β -hydroxylase has been shown to be associated with decision making and addictive behaviors such as alcohol and smoking, attention deficit hyperactivity disorder, and also with neurological diseases such as Schizophrenia and Alzheimer's.

Dopamine β -hydroxylase Inhibitors & Modulators

<p>Etamicastat (BIA 5-453) Cat. No.: HY-14838</p>	<p>Nepicastat (SYN117; RS-25560-197) Cat. No.: HY-13289</p>
<p>Bioactivity: Etamicastat (BIA 5-453) is a potent and reversible peripheral dopamine-β-hydroxylase (DBH) inhibitor ^[1].</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 250 mg, 500 mg</p> <div style="text-align: right;">  </div>	<p>Bioactivity: Nepicastat (SYN117; RS-25560-197) is a dopamine beta-hydroxylase inhibitor with IC₅₀ of 8.5 \pm 0.8 and 9.0 \pm 0.8 nM for bovine and human, respectively.</p> <p>Purity: >98%</p> <p>Clinical Data: Phase 2</p> <p>Size: 5 mg, 10 mg, 50 mg</p> <div style="text-align: right;">  </div>
<p>Nepicastat hydrochloride (SYN-117 hydrochloride; RS-25560-197 hydrochloride) Cat. No.: HY-13289A</p>	<p>Zamicastat (BIA 5-1058) Cat. No.: HY-106004</p>
<p>Bioactivity: Nepicastat hydrochloride (SYN-117 hydrochloride; RS-25560-197 hydrochloride) is a dopamine beta-hydroxylase inhibitor with IC₅₀ of 8.5 \pm 0.8 and 9.0 \pm 0.8 nM for bovine and human, respectively. IC₅₀ value: 8.5/9.0 nM (bovine/human dopamine beta-hydroxylase) Dopamine beta-hydroxylase is an enzyme that...</p> <p>Purity: 99.98%</p> <p>Clinical Data: Phase 2</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg</p> <div style="text-align: right;">  </div>	<p>Bioactivity: Zamicastat (BIA 5-1058) is a dopamine β-hydroxylase (DBH) inhibitor that could cross the blood-brain barrier (BBB) and cause central as well as peripheral effects. Zamicastat is also a concentration-dependent dual P-gp and BCRP inhibitor with IC₅₀ values of 73.8 μM and 17.0 μM, respectively ^[1]....</p> <p>Purity: 99.95%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</p> <div style="text-align: right;">  </div>