Product Data Sheet

(S)-CE-123

 Cat. No.:
 HY-163384

 CAS No.:
 2378384-49-5

 Molecular Formula:
 C₁₇H₁₅NOS₂

Molecular Weight: 313.44

Target: Dopamine Transporter
Pathway: Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description (S)-CE-123 is a potent, selective, and novel atypical dopamine transporter (DAT) inhibitor with an EC₅₀ of 2.76 μM in uptake

inhibition assays conducted in HEK293 cells stably expressing human isoforms of DAT. (S)-CE-123, a Modafinil analogue, is able to penetrate the blood-brain barrier. (S)-CE-123 improves cognitive and motivational processes in experimental

animals[1][2].

In Vivo (S)-CE-123 (6.0, 12.0, 24.0 mg/kg; ip; 30 min before testing) significantly attenuates the effects of TBZ (Tetrabenazine; HY-

B0590) on lever pressing and chow intake. (S)-CE-123 alone has no significant difference with vehicle-treated rats^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Trained rats (adult male Sprague-Dawley rats) $^{\left[1 ight]}$
Dosage:	6.0, 12.0, 24.0 mg/kg
Administration:	IP; 30 min before testing
Result:	Attenuated the effects of TBZ (1.0 mg/kg) on lever pressing and chow intake.

REFERENCES

[1]. Renee A Rotolo, et al. The Novel Atypical Dopamine Uptake Inhibitor (S)-CE-123 Partially Reverses the Effort-Related Effects of the Dopamine Depleting Agent Tetrabenazine and Increases Progressive Ratio Responding. Front Pharmacol. 2019 Jun 28:10:682.

[2]. Eduardo R. Perez Gonzalez, et al. Process Development and Scale-Up of a Novel Atypical DAT Inhibitor (S)-CE-123. ACS Omega 2024, March 4.

Caution: Product has not been fully validated for medical applications. For research use only.

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