# PRODUCT INFORMATION



P7C3-A20

Item No. 24201

CAS Registry No.: 1235481-90-9

Formal Name: 3,6-dibromo-\(\beta\)-fluoro-N-(3-methoxy

phenyl)-9H-carbazole-9-propanamine

MF:  $C_{22}H_{19}Br_2FN_2O$ 

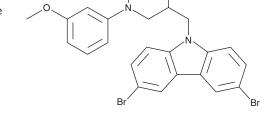
FW: 506.2 **Purity:** ≥95%

UV/Vis.:  $\lambda_{max}$ : 212, 234, 242, 270, 302 nm

A crystalline solid Supplied as:

Storage: -20°C Stability: ≥4 years

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



### **Laboratory Procedures**

P7C3-A20 is supplied as a crystalline solid. A stock solution may be made by dissolving the P7C3-A20 in the solvent of choice, which should be purged with an inert gas. P7C3-A20 is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

### Description

P7C3-A20 is a derivative of P7C3 (Item No. 16682) that has proneurogenic and neuroprotective activity. It increases proliferation in the subgranular zone (SGZ) of the adult mouse dentate gyrus in a dose-dependent manner when administered at doses ranging from 0.1 to 10 μM. It also protects U2OS cells from calcium-induced mitochondrial dissolution. In a rat model of traumatic brain injury, P7C3-A20 (10 mg/kg, i.p., twice daily for one week) decreases contusion volume, increases proliferation in the SGZ, and decreases the latency to reach the platform in the Morris water maze to sham surgery control levels.<sup>2</sup> It also prevents or reverses dopaminergic cell death and motor deficits in a 6-OHDA rat model of Parkinson's disease.3

### References

- 1. Pieper, A.A., Xie, S., Capota, E., et al. Discovery of a proneurogenic, neuroprotective chemical. Cell 142(1), 39-51 (2010).
- Blaya, M.O., Bramlett, H.M., Naidoo, J., et al. Neuroprotective efficacy of a proneurogenic compound after traumatic brain injury. J. Neurotrauma 31(5), 476-486 (2014).
- 3. De Jesús-Cortés, H., Miller, A.D., Britt, J.K., et al. Protective efficacy of P7C3-S243 in the 6-hydroxydopamine model of Parkinson's disease. NPJ Parkinsons Dis. 1, 15010 (2015).

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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