

DATA SHEET

Product Name: P7C3

Catalog #: N-3004

Alt: 1-(3,6-dibromo-9H-carbazol-9-yl)-3-(phenylamino)propan-2-ol

Molecular Mass: 474.2 C₂₁H₁₈Br₂N₂O

Analysis: >98% (TLC); NMR (Conforms)

Supplied As: Off-white powder

Resuspension: May be dissolved in DMSO (40 mg/ml)

Storage: Store desiccated as supplied at ambient temperature for up to 2 years.
Store solutions at -20°C for up to 2 months.

Description: P7C3 exerts proneurogenic activity by protecting newborn neurons from apoptosis. Prolonged administration to aged rats impedes neuronal death and preserves cognitive capacity¹. Delays disease progression in G93A-SOD2 mutant mouse model of amyotrophic lateral sclerosis². Blocks MPTP-mediated cell death of dopaminergic neurons in the substantia nigra of adult mice, a model of Parkinson disease³. Restores hippocampal neurogenesis in a mouse model of Down Syndrome⁴. The mechanism of action involves activation of nicotinamide phosphoribosyltransferase (NAMPT) with concomitant increase of intracellular levels of NAD⁵. Active *in vivo*.

References:

1. Pieper, A.A., et al., (2010) *Cell*, 142: 39
2. Tesla, T., et al., (2012) *Proc. Natl. Acad. Sci. USA*, 109: 17016
3. De Jesus-Cortes, H., et al., (2012) *Proc. Natl. Acad. Sci. USA*, 109: 17010
4. Latchney, S.E., et al., (2015) *Neurosci. Lett.*, 591: 86
5. Wang, G., et al., (2014) *Cell*, 158: 1324

For research use only. Not for use in humans.