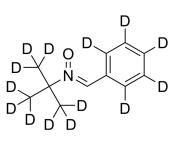
## **MCE** MedChemExpress

## N-tert-Butyl- $\alpha$ -phenylnitrone-d<sub>14</sub>

Cat. No.:	HY-128463S	
CAS No.:	119391-92-3	
Molecular For	rmula: C <sub>11</sub> HD <sub>14</sub> NO	DDd
Molecular We	ight: 191.33	
Target:	COX; Reactive Oxygen Species	D
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-ĸB	
Storage:	Please store the product under the recommended conditions in the Certificate of	DD
	Analysis.	



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DIOLOGICAL ACTIVI	
Description	N-tert-Butyl-α-phenylnitrone-d <sub>14</sub> is the deuterium labeled N-tert-Butyl-α-phenylnitrone[1]. N-tert-Butyl-α-phenylnitrone is a nitrone-based free radical scavenger that forms nitroxide spin adducts. N-tert-Butyl-α-phenylnitrone inhibits COX2 catalytic activity. N-tert-Butyl-α-phenylnitrone has potent ROS scavenging, anti-inflammatory, neuroprotective, anti-aging and anti- diabetic activities, and can penetrate the blood-brain barrier[2][3][4][5].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

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[4]. Y Kotake, et al. Inhibition of NF-kappaB, iNOS mRNA, COX2 mRNA, and COX Catalytic Activity by phenyl-N-tert-butylnitrone (PBN). Biochim Biophys Acta. 1998 Nov 191448(1):77-84.

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

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