Product Data Sheet

Product Name: DPNB-ABT 594
Cat. No.: GC50552

Chemical Properties

Cas. No.			
SMILES	ClC1=NC=C(C=C1)OC[C@@H]2CCN2C(C)C3=CC(OCCOCCOCCOC)=C(OCCOCCOCCOC)C=C3[N+]([O-])=O		
Formula	$C_{31}H_{46}ClN_3O_{11}$	M.Wt	672.16
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	DPNB-ABT 594		

Background

Nitrobenzyl-caged ABT 594 , a selective α4β2 nAChR agonist. One-photon uncaging evokes large inward currents and Ca2+ transients on cell bodies and dendrites of medial habenular neurons in mouse brain slices. Two-photon uncaging induces fast nAChR-mediated currents. Photolyzed with high quantum yield of 0.20. Effective photolysis occurs using one- or two-photon excitation; one-photon uncaging requires illumination at 410 nm for 1.5-3 ms; two-photon uncaging requires illumination with appropriate two photon pulse laser at 710 nm for ~2 ms.

Passlick et al (2018) Optical probing of acetylcholine receptors on neurons in the medial habenula with a novel caged nicotine drug analogue. J.Physiol. 596 5307 PMID:30222192

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