PRODUCT INFORMATION



Iperoxo (iodide)

Item No. 27235

CAS Registry No.:	247079-84-1	
Formal Name:	4-[(4,5-dihydro-3-isoxazolyl)oxy]-N,N,N-	
	trimethyl-2-butyn-1-aminium, monoiodide	
MF:	$C_{10}H_{17}N_{2}O_{2} \bullet I$	N O
FW:	324.2	
Purity:	≥98%	\ / • ŀ
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

Iperoxo (iodide) is supplied as a solid. A stock solution may be made by dissolving the iperoxo (iodide) in water (warmed). The solubility of iperoxo (iodide) in water (warmed) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Iperoxo is an agonist of muscarinic acetylcholine receptors.^{1,2} It stimulates [³⁵S]GTPγS binding to CHO cell membranes expressing human M_2 muscarinic receptors and cell membranes expressing M_4 muscarinic receptors (EC₅₀s = 2.12 and 8.47 nM, respectively).¹ Iperoxo induces M_1 -dependent inhibition of the twitch response in electrically-stimulated isolated rabbit vas deferens (pD₂ = 9.87) and M₃-mediated contraction of isolated guinea pig ileum (pD₂ = 9.78).² In vivo, iperoxo reduces formalin-induced paw licking and acetic acid-induced writhing in mice $(ED_{50}s = 0.004 \text{ and } 0.001 \text{ mg/kg}, \text{ respectively}).^3$

References

- 1. Croy, C.H., Schober, D.A., Xiao, H., et al. Characterization of the novel positive allosteric modulator, LY2119620, at the muscarinic M₂ and M₄ receptors. Mol. Pharmacol. 86(1), 106-115 (2014).
- 2. Dallanoce, C., Conti, P., De Amici, M., et al. Synthesis and functional characterization of novel derivatives related to oxotremorine and oxotremorine-M. Bioorg. Med. Chem. 7(8), 1539-1547 (1999).
- Barocelli, E., Ballabeni, V., Bertoni, S., et al. Evidence for specific analgesic activity of a muscarinic agonist 3. selected among a new series of acetylenic derivatives. Life Sci. 68(15), 1775-1785 (2001).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

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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