

## **Product** Data Sheet

## (R)-Oxybutynin

Cat. No.:HY-B0267CCAS No.:119618-21-2Molecular Formula: $C_{22}H_{31}NO_3$ Molecular Weight:357.49Target:mAChR

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	(R)-Oxybutynin (Aroxybutynin) is the racemic isomer of Oxybutynin and an orally active muscarinic receptor antagonist. (R)-Oxybutynin has antispasmodic, antimuscarinic, and anticholinergic activities and competitively antagonizes carbachol-induced contractions. (R)-Oxybutynin can be used to study urinary incontinence caused by neurogenic bladder dysfunction [1][2][3].
IC <sub>50</sub> & Target	Muscarinic receptor, $mAChR^{[1][2]}$
In Vitro	The metabolism of Oxybutynin is stereoselective and it is extensively metabolized primarily by cytochrome P450 3A4 to form NDO. (R)-Oxybutynin has lower plasma concentrations than the other enantiomer <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Smith ER, et al. Comparison of the antimuscarinic and antispasmodic actions of racemic oxybutynin and desethyloxybutynin and their enantiomers with those of racemic terodiline. Arzneimittelforschung. 1998 Oct;48(10):1012-8.

[2]. Zobrist RH, et al. Pharmacokinetics of the R- and S-enantiomers of oxybutynin and N-desethyloxybutynin following oral and transdermal administration of the racemate in healthy volunteers. Pharm Res. 2001 Jul;18(7):1029-34.

[3]. Siddiqui MA, et al. Oxybutynin extended-release: a review of its use in the management of overactive bladder. Drugs. 2004;64(8):885-912.

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

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