MedChemExpress

## (R)-Oxybutynin

| Cat. No.: | $\mathrm{HY}-\mathrm{BO} 267 \mathrm{C}$ |
| :--- | :--- |
| CAS No.: | $119618-21-2$ |
| Molecular Formula: | $\mathrm{C}_{22} \mathrm{H}_{31} \mathrm{NO}_{3}$ |
| Molecular Weight: | 357.49 |
| Target: | mAChR |
| Pathway: | GPCR/G Protein; Neuronal Signaling |
| Storage: | Please store the product under the recommended conditions in the Certificate of |
|  | Analysis. |



## BIOLOGICAL ACTIVITY

## Description

## $\mathrm{IC}_{50}$ \& Target

In Vitro
$(\mathrm{R})$-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 carbacholinduced contractions. (R)-Oxybutynin can be used to study urinary incontinence caused by neurogenic bladder dysfunction [1][2][3].

Muscarinic receptor, $\mathrm{mAChR}^{[1][2]}$

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 ${ }^{[2]}$
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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