**Product Data Sheet**

**Product Name:** Tolterodine  
**CAS No.:** 124937-51-5  
**Cat. No.:** HY-A0024  
**MWT:** 325.49  
**Formula:** C22H31NO  
**Purity:** >98%  
**Solubility:** 10 mM in DMSO

**Mechanisms:** Pathways: GPCR/G protein; Target: mAChR  
Pathways: Neuronal Signaling; Target: mAChR

**Biological Activity:**
Tolterodine (PNU-200583) is a potent muscarinic receptor antagonists that show selectivity for the urinary bladder over salivary glands in vivo.

**IC50 Value:**  
**Target:** mAChR  
**in vitro:** Carbachol-induced contractions of isolated guinea pig bladder were effectively inhibited by tolterodine (IC50 14 nM) and 5-HM (IC50 5.7 nM). The IC50 values were in the microM range and the antimuscarinic potency of tolterodine was 27, 200 and 370-485 times higher, respectively, than its potency in blocking histamine receptors, alpha-adrenoceptors and calcium channels. The active metabolite, 5-HM, was >900 times less potent at these sites than at bladder muscarinic receptors [1].  
**in vivo:** Tolterodine was extensively metabolized in vivo [2]. In the passive-avoidance test, tolterodine at 1 or 3 mg/kg had no effect on memory; the latency to cross and percentage of animals crossing were comp...

**References:**

**Caution:** Not fully tested. For research purposes only

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