

# PRODUCT INFORMATION

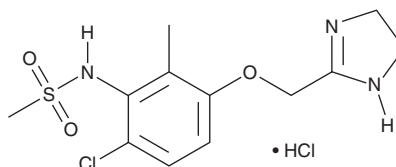


## Dabuzalgron (hydrochloride)

Item No. 45580

**CAS Registry No.:** 219311-43-0  
**Formal Name:** N-[6-chloro-3-[(4,5-dihydro-1H-imidazol-2-yl)methoxy]-2-methylphenyl]-methanesulfonamide, monohydrochloride

**Synonym:** Ro 115-1240  
**MF:** C<sub>12</sub>H<sub>16</sub>ClN<sub>3</sub>O<sub>3</sub>S • HCl  
**FW:** 354.2  
**Purity:** ≥95%  
**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

Dabuzalgron (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the dabuzalgron (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Dabuzalgron (hydrochloride) is slightly soluble (0.1-1 mg/ml) in methanol.

### Description

Dabuzalgron is a partial agonist of the  $\alpha_{1A}$ -adrenergic receptor ( $\alpha_{1A}$ -AR).<sup>1</sup> It selectively binds to  $\alpha_{1A}$ -ARs over  $\alpha_{1B}$ - and  $\alpha_{1D}$ -ARs in CHO-K1 cells expressing the recombinant human receptors ( $K_{iS}$  = 0.041, 1.6, and 6.5  $\mu$ M, respectively) and selectively induces inositol phosphate accumulation in  $\alpha_{1A}$ -AR-expressing CHO-K1 cells over those expressing  $\alpha_{1B}$ - or  $\alpha_{1D}$ -ARs ( $EC_{50}$ s = 0.204, >100, and >100  $\mu$ M, respectively). Dabuzalgron induces urethral tension in rabbit bladder neck preparations ( $EC_{50}$  = 0.363  $\mu$ M). Intravenous administration of dabuzalgron increases intraurethral pressure and diastolic arterial pressure in anesthetized micropigs ( $ED_{50}$ s = 41 and 36  $\mu$ g/kg, respectively). Dabuzalgron (300  $\mu$ g/kg) increases urethral tension but does not affect diastolic arterial pressure or heart rate in conscious micropigs. Oral administration of dabuzalgron (10  $\mu$ g/kg) decreases cardiac fibrosis and prevents decreases in heart rate and fractional shortening induced by doxorubicin (Item No. 15007) in a mouse model of cardiotoxicity.<sup>2</sup>

### References

1. Blue, D.R., Daniels, D.V., Gever, J.R., *et al.* Pharmacological characteristics of Ro 115-1240, a selective alpha1A/1L-adrenoceptor partial agonist: a potential therapy for stress urinary incontinence. *BJU Int.* **93**(1), 162-170 (2004).
2. Beak, J., Huang, W., Parker, J.S., *et al.* An oral selective alpha-1A adrenergic receptor agonist prevents doxorubicin cardiotoxicity. *JACC Basic Transl. Sci.* **2**(1), 39-53 (2017).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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