

# PRODUCT INFORMATION

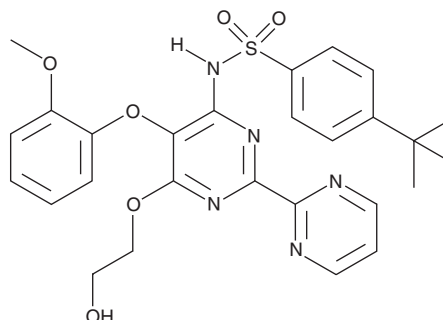


## Bosentan

Item No. 11731

**CAS Registry No.:** 147536-97-8  
**Formal Name:** 4-(1,1-dimethylethyl)-N-[6-(2-hydroxyethoxy)-5-(2-methoxyphenoxy)[2,2'-bipyrimidin]-4-yl]-benzenesulfonamide

**Synonym:** Ro 47-0203  
**MF:** C<sub>27</sub>H<sub>29</sub>N<sub>5</sub>O<sub>6</sub>S  
**FW:** 551.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 215, 267 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Bosentan is supplied as a crystalline solid. A stock solution may be made by dissolving the bosentan in the solvent of choice. Bosentan is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of bosentan in these solvents is approximately 11, 12, and 20 mg/ml, respectively.

Bosentan is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bosentan should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Bosentan has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Bosentan is an antagonist of the endothelin receptors type A ( $K_i = 6.5$  nM) and type B ( $K_i = 340$  nM).<sup>1,2</sup>

### References

1. Jae, H.-S., Winn, M., Dixon, D.B., *et al.* Pyrrolidine-3-carboxylic acids as endothelin antagonists. 2. Sulfonamide-based ETA/ETB mixed antagonists. *J. Med. Chem.* **40**, 3217-3227 (1997).
2. Wu, C., Decker, E.R., Blok, H., *et al.* Discovery, modeling, and human pharmacokinetics of N-(2-acetyl-4,6-dimethylphenyl)-3-(3,4-dimethylisoxazol-5-ylsulfamoyl)-thiophene-2-carboxamide (TBC3711), a second generation, ETA selective, and orally bioavailable endothelin antagonist. *J. Med. Chem.* **47**, 1969-1986 (2004).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 06/29/2017

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM