

PRODUCT INFORMATION

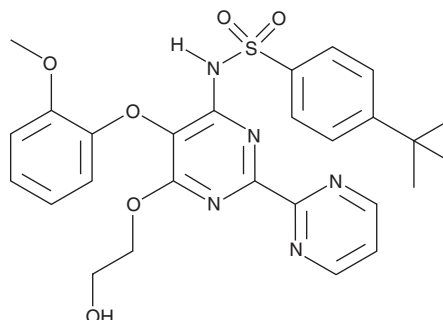


Bosentan

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: C₂₇H₂₉N₅O₆S
FW: 551.6
Purity: ≥98%
UV/Vis.: λ_{max}: 215, 267 nm
Supplied as: A crystalline 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

Bosentan is supplied as a crystalline solid. A stock solution may be made by dissolving the bosentan in the solvent of choice, which should be purged with an inert gas. Bosentan is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). 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).^{1,2}

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**(20), 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**(8), 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, 11/30/2022

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