

PRODUCT INFORMATION



Bosentan-d₄ Item No. 22097

CAS Registry No.: 1065472-77-6
Formal Name: 4-(1,1-dimethylethyl)-N-[6-(2-hydroxyethoxy-1,1,2,2-d₄)-5-(2-methoxyphenoxy)[2,2'-bipyrimidin]-4-yl]-benzenesulfonamide

MF: C₂₇H₂₅D₄N₅O₆S

FW: 555.6

Chemical Purity: ≥95% (Bosentan)

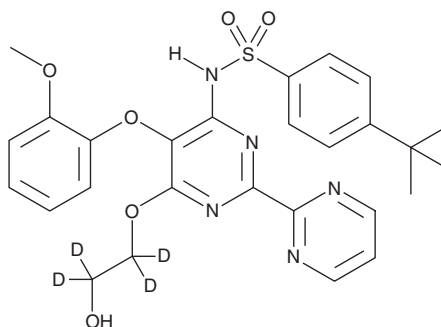
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀

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

Bosentan-d₄ is an internal standard for the quantification of bosentan (Item No. 11731) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

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.

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