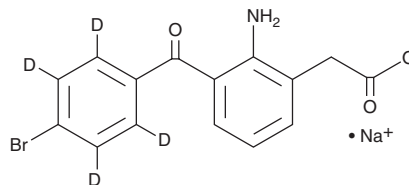


PRODUCT INFORMATION



Bromfenac-d₄ (sodium salt) Item No. 26598

CAS Registry No.: 2749400-35-7
Formal Name: 2-amino-3-(4-bromobenzoyl-2,3,5,6-d₄)-benzeneacetic acid, monosodium salt
MF: C₁₅H₇BrD₄NO₃ • Na
FW: 360.2
Chemical Purity: ≥98% (Bromfenac)
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

Bromfenac-d₄ (sodium salt) is intended for use as an internal standard for the quantification of bromfenac (Item No. 23763) 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).

Bromfenac-d₄ (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the bromfenac-d₄ (sodium salt) in the solvent of choice, which should be purged with an inert gas. Bromfenac-d₄ (sodium salt) is soluble in organic solvents such as ethanol and DMSO at concentrations of 5 and 100 mM, respectively.

Description

Bromfenac is an inhibitor of cyclooxygenase 2 (COX-2; IC₅₀ = 6.6 nM) that is selective over COX-1 (IC₅₀ = 210 nM).¹ It inhibits prostaglandin E₂ (PGE₂; Item No. 14010) production in a rabbit model of LPS-induced eye inflammation. Bromfenac also decreases inflammation following cataract removal in dogs when administered as a 0.9% topical solution on a tapering schedule for 24 weeks.² Formulations containing bromfenac have been used in the treatment of postoperative inflammation following cataract surgery.

References

1. Waterbury, L.D., Silliman, D., and Jolas, T. Comparison of cyclooxygenase inhibitory activity and ocular anti-inflammatory effects of ketorolac tromethamine and bromfenac sodium. *Curr. Med. Res. Opin.* **22**(6), 1133-1140 (2006).
2. Brookshire, H.L., English, R.V., Nadelstein, B., et al. Efficacy of COX-2 inhibitors in controlling inflammation and capsular opacification after phacoemulsification cataract removal. *Vet. Ophthalmol.* **18**(3), 175-185 (2015).

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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