

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# PRODUCT INFORMATION



## Bromfenac-d<sub>4</sub> (sodium salt)

Item No. 26598

Formal Name: 2-amino-3-(4-bromobenzoyl-

2,3,5,6-d<sub>4</sub>)-benzeneacetic acid,

monosodium salt

MF: C<sub>15</sub>H<sub>7</sub>BrD<sub>4</sub>NO<sub>3</sub> • Na

FW: 360.2

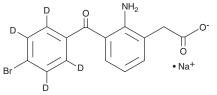
**Chemical Purity:** ≥98% (Bromfenac)

Deuterium

≥99% deuterated forms  $(d_1-d_4)$ ; ≤1%  $d_0$ Incorporation:

Supplied as: A 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**

Bromfenac-d<sub>4</sub> (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-d, (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the bromfenac- $d_{\alpha}$  (sodium salt) in the solvent of choice. Bromfenac- $d_{\alpha}$  (sodium salt) is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas, at concentrations of 5 and 100 mM, respectively.

#### Description

Bromfenac is an inhibitor of cyclooxygenase 2 (COX-2;  $IC_{50}$  = 6.6 nM) that is selective over COX-1 ( $IC_{50}$  = 210 nM).<sup>1</sup> It inhibits prostaglandin  $E_2$  (PGE<sub>2</sub>; 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.<sup>2</sup> 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.

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

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

Copyright Cayman Chemical Company, 12/13/2018

#### **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