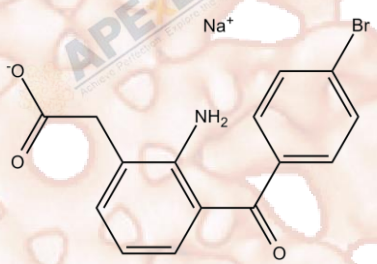
Product Data Sheet

Bromfenac Sodium



Cat. No.: B1684

CAS No.: 91714-93-1

Formula: C15H11BrNO3·Na

M.Wt: 356.15

Synonyms:

Target:

Pathway:

Storage: Store at -20°C

Solvent & Solubility

In Vitro

insoluble in EtOH; ⩾14.7 mg/mL in DMSO; ⩾26.85 mg/mL in H2O

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.8078 mL	14.0390 mL	28.0781 mL
5 mM	0.5616 mL	2.8078 mL	5.6156 mL
10 mM	0.2808 mL	1.4039 mL	2.8078 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	COX inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Corneal epithelial cells
Preparation method:	The solubility of this compound in DMSO is > 14.7 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.
Reacting conditions:	1, 4, 12, 24 and 48 hrs

	Applications:	Compared with Bromfenac Sodium, the cellular metabolic activity of Diclofenac and Fluorometholone markedly decreased after 12-hr exposure. However, the K+ and Cl- concentrations, pH and osmolarity were similar among different treatment groups. In additioin, Bromfenac Sodium significantly promoted cell migration, as well as restored wound gap after 48-hr exposure, compared with Diclofenac and Fluorometholone.
In Vivo	**Animal experiment**	
	Animal models:	A rabbit model of ocular inflammation
	Dosage form:	50 μL 0.09%
	Applications:	In a rabbit model of ocular inflammation, Bromfenac Sodium almost completely inhibited lipopolysaccharide (LPS)-induced increases in fluorescein isothiocyanate (FITC)-dextran in the anterior chamber as well as the contralateral eye. In addition, Bromfenac Sodium significantly inhibited LPS-induced increases in PGE2 concentrations in the aqueous humor.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Lee JS, Kim YH, Park YM. The Toxicity of Nonsteroidal Anti-inflammatory Eye Drops against Human Corneal Epithelial Cells in Vitro. J Korean Med Sci. 2015 Dec;30(12):1856-64.

[2]. Waterbury LD, Silliman D, Jolas T. Comparison of cyclooxygenase inhibitory activity and ocular anti-inflammatory effects of ketorolac tromethamine and bromfenac sodium. Curr Med Res Opin. 2006 Jun;22(6):1133-40.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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