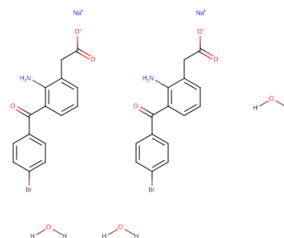


|                          |                                                                   |
|--------------------------|-------------------------------------------------------------------|
| <b>Product Name</b>      | : Bromfenac sodium                                                |
| <b>Synonyms</b>          | : Bromfenac Sodium Sesquihydrate; AHR 10282B                      |
| <b>Cat No.</b>           | : M10754                                                          |
| <b>CAS Number</b>        | : 120638-55-3                                                     |
| <b>Molecular Formula</b> | : C <sub>15</sub> H <sub>11</sub> BrNNaO <sub>3</sub>             |
| <b>Formula Weight</b>    | : 356.15                                                          |
| <b>Chemical Name</b>     | : Disodium 2-[2-amino-3-(4-bromobenzoyl)phenyl]acetate trihydrate |



|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b> | : Bromfenac Sodium is the sodium salt form of bromfenac, a nonsteroidal anti-inflammatory drug (NSAID) with analgesic and anti-inflammatory activities. Upon ophthalmic administration, bromfenac binds to and inhibits the activity of cyclooxygenase II (COX II), an enzyme which converts arachidonic acid to cyclic endoperoxides, precursors of prostaglandins (PG). By inhibiting PG formation, bromfenac is able to inhibit PG-induced inflammation, thereby preventing vasodilation, leukocytosis, disruption of the blood-aqueous humor barrier, an increase in vascular permeability and an increase in intraocular pressure (IOP). |
| <b>Pathway</b>     | : Chromatin/Epigenetic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Target</b>      | : COX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Receptor</b>    | : COX-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Solubility</b>  | : DMSO: 10 mM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>SMILES</b>      | : <chem>O=C([O-])CC1=CC=CC(C(C2=CC=C(Br)C=C2)=O)=C1N.O=C([O-])CC3=CC=CC(C(C4=CC=C(Br)C=C4)=O)=C3N.[H]O[H].[H]O[H].[H]O[H].[Na+].[Na+]</chem>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage</b>     | : (-20°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Stability</b>   | : ≥ 2 years                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Reference</b>   | :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

1. Shimura M, Yasuda K. Br J Ophthalmol. 2015 Feb;99(2):215-9.