

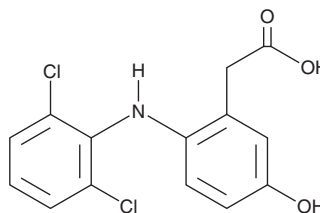
# PRODUCT INFORMATION



## 5-hydroxy Diclofenac

Item No. 23369

**CAS Registry No.:** 69002-84-2  
**Formal Name:** 2-[(2,6-dichlorophenyl)amino]-5-hydroxybenzeneacetic acid  
**MF:** C<sub>14</sub>H<sub>11</sub>Cl<sub>2</sub>NO<sub>3</sub>  
**FW:** 312.2  
**Purity:** ≥95%  
**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

5-hydroxy Diclofenac is supplied as a solid. A stock solution may be made by dissolving the 5-hydroxy diclofenac in the solvent of choice, which should be purged with an inert gas. 5-hydroxy Diclofenac is soluble in DMSO

### Description

5-hydroxy Diclofenac is an active metabolite of the non-steroidal anti-inflammatory drug (NSAID) and COX inhibitor diclofenac (Item Nos. 70680 | 22983).<sup>1,2</sup> It is formed by the cytochrome P450 (CYP) isoforms CYP3A4, CYP2C9, CYP2C19, and CYP1A2.<sup>3</sup> 5-hydroxy Diclofenac is cytotoxic to HL-60 leukemia cells (IC<sub>50</sub> = 661 μM).<sup>4</sup> It induces apoptosis and increases caspase-3 activity in rat hepatocytes in a concentration-dependent manner.<sup>2</sup>

### References

1. Sawchuk, R.J., Maloney, J.A., Cartier, L.L., *et al.* Analysis of diclofenac and four of its metabolites in human urine by HPLC. *Pharm. Res.* **12(5)**, 756-762 (1995).
2. Gómez-Lechón, M.J., Ponsoda, X., O'Connor, E., *et al.* Diclofenac induces apoptosis in hepatocytes by alteration of mitochondrial function and generation of ROS. *Biochem. Pharmacol.* **66(11)**, 2155-2167 (2003).
3. Bort, R., Macé, K., Boobis, A., *et al.* Hepatic metabolism of diclofenac: Role of human CYP in the minor oxidative pathways. *Biochem. Pharmacol.* **58(5)**, 787-796 (1999).
4. Morgan, A.G.M., Babu, D., Michail, K., *et al.* An evaluation of myeloperoxidase-mediated bio-activation of NSAIDs in promyelocytic leukemia (HL-60) cells for potential cytotoxic selectivity. *Toxicol. Lett.* **280**, 48-56 (2017).

#### 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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