

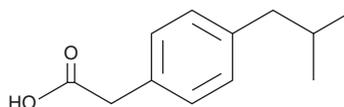
# Product Information



## Ibufenac

Item No. 17874

<b>CAS Registry No.:</b>	1553-60-2
<b>Formal Name:</b>	4-(2-methylpropyl)-benzeneacetic acid
<b>Synonyms:</b>	Dytransin, Ibutac, 4-Isobutylphenylacetic Acid, NSC 99976
<b>MF:</b>	C <sub>12</sub> H <sub>16</sub> O <sub>2</sub>
<b>FW:</b>	192.3
<b>Purity:</b>	≥95%
<b>Stability:</b>	≥2 years at -20°C
<b>Supplied as:</b>	A crystalline solid
<b>UV/Vis.:</b>	λ <sub>max</sub> : 213 nm



### Laboratory Procedures

For long term storage, we suggest that ibufenac be stored as supplied at -20°C. It should be stable for at least two years.

Ibufenac is supplied as a crystalline solid. A stock solution may be made by dissolving the ibufenac in the solvent of choice. Ibufenac is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of ibufenac in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of ibufenac can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ibufenac in PBS, pH 7.2, is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Ibufenac is an analog of the NSAID ibuprofen (Item No. 70280) that inhibits COX-1 and -2 activity with IC<sub>50</sub> values of 17.4 and 13.1 μM, respectively.<sup>1</sup>

### Reference

1. Gülcan, H.O., Ünlü, S., Dimoglo, A., *et al.* Marginally designed new profen analogues have the potential to inhibit cyclooxygenase enzymes. *Arch. Pharm. Chem. Life Sci.* **348**, 55-61 (2015).

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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