

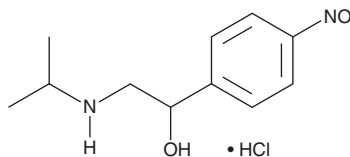
# PRODUCT INFORMATION



## Nifenalol (hydrochloride)

Item No. 32944

**CAS Registry No.:** 5704-60-9  
**Formal Name:**  $\alpha$ -[[[(1-methylethyl)amino]methyl]-4-nitro-benzenemethanol, monohydrochloride  
**Synonym:** INPEA  
**MF:**  $C_{11}H_{16}N_2O_3 \cdot HCl$   
**FW:** 260.7  
**Purity:**  $\geq 95\%$   
**UV/Vis.:**  $\lambda_{max}$ : 265 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}C$   
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Nifenalol (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the nifenalol (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Nifenalol (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of nifenalol (hydrochloride) in ethanol is approximately 5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

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 nifenalol (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of nifenalol (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Nefenalol is an antagonist of  $\beta$ -adrenergic receptors ( $\beta$ -ARs).<sup>1</sup> It inhibits contractions induced by the  $\beta$ -AR agonist isoprenaline (isoproterenol; Item No. 15592) in isolated rabbit right ventricular strips ( $pA_2 = 6.05$ ).

### Reference

1. Singh, B.N. and Williams, E.M. Effects on cardiac muscle of the  $\beta$ -adrenoceptor blocking drugs INPEA and LB46 in relation to their local anaesthetic action on nerve. *Br. J. Pharmacol.* **43**(1), 10-22 (1971).

#### 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

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

Copyright Cayman Chemical Company, 11/11/2022

#### 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](http://WWW.CAYMANCHEM.COM)