

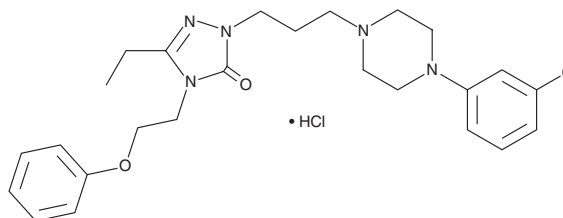
# PRODUCT INFORMATION



## Nefazodone (hydrochloride)

Item No. 10012642

**CAS Registry No.:** 82752-99-6  
**Formal Name:** 2-[3-[4-(3-chlorophenyl)-1-piperazinyl]propyl]-5-ethyl-2,4-dihydro-4-(2-phenoxyethyl)-3H-1,2,4-triazol-3-one, monohydrochloride  
**Synonyms:** BMY 13754, MJ13754-1  
**MF:** C<sub>25</sub>H<sub>32</sub>ClN<sub>5</sub>O<sub>2</sub> • HCl  
**FW:** 506.5  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Description

Nefazodone is a serotonin (5-HT), norepinephrine, and dopamine reuptake inhibitor (SNDRi; K<sub>i</sub>s = 137, 570, 2,380 nM, respectively, in rat brain synaptosomes).<sup>1</sup> It is also an antagonist of 5-HT<sub>2A</sub>, 5-HT<sub>1A</sub>, and histamine H<sub>1</sub> receptors, as well as α<sub>1</sub>- and α<sub>2</sub>-adrenergic receptors (α<sub>2</sub>-ARs; K<sub>i</sub>s = 7.1, 52, 30, 5.5, and 84 nM, respectively).<sup>2</sup> Nefazodone (100 mg/kg) reduces immobility time in the tail suspension test in gerbils.<sup>3</sup> However, it is toxic to isolated human hepatocytes in a cultured sandwich hepatocyte preparation when used at a concentration of 30 μM.<sup>4</sup> Formulations containing nefazodone have previously been used in the treatment of depression.

### References

1. Thompson, J.A., Hull, J.E., Norris, K.J., *et al.* Glucuronidation of propranolol and 4'-hydroxypropranolol. Substrate specificity and stereoselectivity of rat liver microsomal glucuronyltransferases. *Drug Metab. Dispos.* **9(5)**, 466-471 (1981).
2. Owens, M.J., Neal, W., Plott, S.J., *et al.* Neurotransmitter receptor and transporter binding profile of antidepressants and their metabolites. *J. Pharmacol. Exp. Ther.* **283(3)**, 1305-1322 (1997).
3. Varty, G.B., Cohen-Williams, M.E., and Hunter, J.C. The antidepressant-like effects of neurokinin NK1 receptor antagonists in a gerbil tail suspension test. *Behav. Pharmacol.* **14(1)**, 87-95 (2003).
4. Kostrubsky, S.E., Strom, S.C., Kalgutkar, A.S., *et al.* Inhibition of hepatobiliary transport as a predictive method for clinical hepatotoxicity of nefazodone. *Toxicol. Sci.* **90(2)**, 451-459 (2006).

#### 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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