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## Nefazodone- $\mathrm{d}_{6}$ dihydrochloride

Cat. No.
HY-B1396S1
Molecular Formula:
$\mathrm{C}_{25} \mathrm{H}_{28} \mathrm{D}_{6} \mathrm{Cl}_{3} \mathrm{~N}_{5} \mathrm{O}_{2}$
Molecular Weight:
Target:
Pathway:
Storage:
548.97

Adrenergic Receptor; 5-HT Receptor; Isotope-Labeled Compounds GPCR/G Protein; Neuronal Signaling; Others

Please store the product under the recommended conditions in the Certificate of Analysis.


HCl HCl

## BIOLOGICAL ACTIVITY

Description

In Vitro

Nefazodone- $\mathrm{d}_{6}$ (dihydrochloride) is deuterium labeled Nefazodone (hydrochloride). Nefazodone hydrochloride (BMY-13754) is a potent and selective $5 \mathrm{HT} 2 \mathrm{~A}(\mathrm{Ki}=5.8 \mathrm{nM})$ antagonist with moderate inhibition of $5-\mathrm{HT}$ and noradrenaline uptake (IC50 of 290 and 300 nM , respectively). Nefazodone hydrochloride is a phenylpiperazine antidepressant with less alpha-adrenergic blocking activity[1][2].

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ${ }^{[1]}$.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216
[2]. Ellingrod VL, et al. Nefazodone: a new antidepressant. Am J Health Syst Pharm. 1995;52(24):2799-2812
[3]. Pullar IA, et al. LY367265, an inhibitor of the 5-hydroxytryptamine transporter and 5-hydroxytryptamine(2A) receptor antagonist: a comparison with the antidepressant, nefazodone. Eur J Pharmacol. 2000;407(1-2):39-46.

## Caution: Product has not been fully validated for medical applications. For research use only.

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