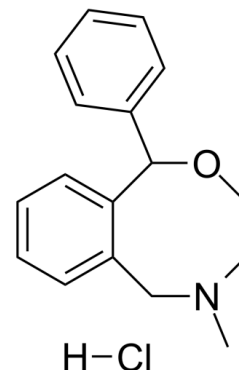


## Data Sheet

<b>Product Name:</b>	Nefopam (hydrochloride)
<b>Cat. No.:</b>	CS-4579
<b>CAS No.:</b>	23327-57-3
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>20</sub> CINO
<b>Molecular Weight:</b>	289.80
<b>Target:</b>	β-catenin
<b>Pathway:</b>	Stem Cell/Wnt
<b>Solubility:</b>	H <sub>2</sub> O : 14 mg/mL (48.31 mM; Need ultrasonic and warming)



### BIOLOGICAL ACTIVITY:

Nefopam hydrochloride (Fenazoxine hydrochloride) is a centrally-acting but non-opioid analgesic drug, for the relief of moderate to severe pain. Nefopam hydrochloride targets β-catenin protein level in mesenchymal cells in-vitro and in-vivo<sup>[1][2]</sup>. **In Vitro:** Nefopam hydrochloride (Fenazoxine hydrochloride) is a non-opioid, non-steroidal, centrally acting analgesic drug that is derivative of the non-sedative benzoxazocine<sup>[1]</sup>. Constitutively elevated β-catenin leads to a delayed and fibrous fracture repair process, and Nefopam inhibits β-catenin mediated signaling during skin wound repair<sup>3]</sup>.

### References:

- [1]. Kim KH, et al. Rediscovery of nefopam for the treatment of neuropathic pain. *Korean J Pain*. 2014 Apr;27(2):103-11.
- [2]. Poon R, et al. A high throughput screen identifies Nefopam as targeting cell proliferation in β-catenin driven neoplastic and reactive fibroproliferative disorders. *PLoS One*. 2012;7(5):e37940.
- [3]. Baht GS, et al. Pharmacologically targeting beta-catenin for NF1 associated deficiencies in fracture repair. *Bone*. 2017 May;98:31-36.

### CAIndexNames:

1H-2,5-Benzoxazocine, 3,4,5,6-tetrahydro-5-methyl-1-phenyl-, hydrochloride (1:1)

### SMILES:

CN1CCOC(C2=CC=CC=C2)C3=CC=CC=C3C1.[H]Cl

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

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