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# Data Sheet

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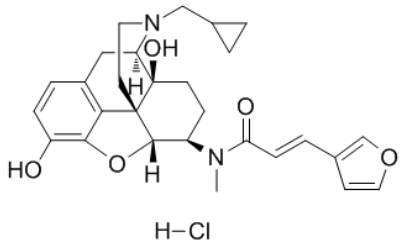
| **Product Name** | : | Nalfurafine hydrochloride |
| **Cat. No.** | : | PC-43173 |
| **CAS No.** | : | 152658-17-8 |
| **Molecular Formula** | : | $C_{28}H_{33}ClN_2O_5$ |
| **Molecular Weight** | : | 513.025 |
| **Target** | : | Opioid Receptor |
| **Solubility** | : | DMSO: 21 mg/mL |




## Biological Activity

Nalfurafine (TRK-820, TRK820) is potent, selective agonist of kappa-opioid receptor with Ki of 3.5 nM, 15-fold less potent for μOR and little affinity for δOR (Ki=53 and 1,200 nM, respectively); also potently binds to mutant κ(E297K), μ(K303E), κ(E297W) and κ(E297A) with Ki of 10-50 nM; inhibits forskolin-stimulated intracellular cAMP accumulation with IC50 of 0.15 nM, which is 100 fold smaller than that of U69593; produces potent antinociceptive effects in vivo.
Other Indication
Approved

## References

Nagase H, et al. Chem Pharm Bull (Tokyo). 1998 Feb;46(2):366-9.

Seki T, et al. Eur J Pharmacol. 1999 Jul 2;376(1-2):159-67.

Endoh T, et al. Life Sci. 1999;65(16):1685-94.

Endoh T, et al. Eur J Pharmacol. 2000 Jan 10;387(2):133-40.



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