

Product Data Sheet

Inhibitors

Screening Libraries

Proteins

Sigma-1 receptor antagonist 5

 $\begin{array}{lll} \textbf{Cat. No.:} & HY\text{-}149335 \\ \textbf{CAS No.:} & 2952808\text{-}33\text{-}0 \\ \textbf{Molecular Formula:} & C_{26}H_{27}N_3O \\ \end{array}$

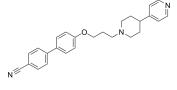
Molecular Weight: 397.51

Target: Sigma Receptor; Histamine Receptor

Pathway: Neuronal Signaling; GPCR/G Protein; Immunology/Inflammation

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



BIOLOGICAL ACTIVITY

Description	Sigma-1 receptor antagonist 5 (compound 12) \boxtimes 4-pyridylpiperidine derivative with analgesic activity \boxtimes is an antagonist of sigma receptor (Ki=4.5 nM (σ 1R) \boxtimes 10 nM (σ 2R)) and histamine H3 (hH ₃ R \boxtimes Ki=7.7 nM \boxtimes IC ₅₀ =215 nM). Sigma-1 receptor antagonist 5 suppresses Capsaicin-induced nociception with antinociceptive activity and shows potent efficacy in nociceptive and neuropathic pain models ^[1] .
IC ₅₀ & Target	Ki: 7.7 nM (σ 1R), 4.5 Nm (σ 2R), 10 nM (hH $_3$ R) ^[1]

REFERENCES

[1]. Szczepańska K, et al. Dual Piperidine-Based Histamine H3 and Sigma-1 Receptor Ligands in the Treatment of Nociceptive and Neuropathic Pain. J Med Chem. 2023 Jul 27;66(14):9658-9683.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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