PRODUCT INFORMATION



JNJ-7777120

Item No. 10011925

CAS Registry No.: 459168-41-3

Formal Name: (5-chloro-1H-indol-2-yl)(4-methyl-

1-piperazinyl)-methanone

MF: $C_{14}H_{16}CIN_3O$ 277.8 FW:

Purity: ≥98%

 λ_{max} : 219, 295 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability:

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

≥4 years

Laboratory Procedures

JNJ-7777120 is supplied as a crystalline solid. A stock solution may be made by dissolving the JNJ-7777120 in the solvent of choice. JNJ-7777120 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of JNJ-7777120 in these solvents is approximately 2 mg/ml in ethanol and approximately 14 mg/ml in DMSO and DMF.

JNJ-7777120 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, JNJ-7777120 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. JNJ-7777120 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

JNJ-7777120 is a potent and selective histamine H_{\perp} receptor antagonist, with a K_i value of approximately 4 nM against the human, mouse, and rat H_4 receptors. 1 Its K_1 values for the histamine H_{1-3} receptors exceed $1~\mu\text{M}$, regardless of species, and it has no or negligible effects on a range of other receptors and transporters. JNJ-777120 inhibits mast cell chemotaxis induced by 10 μ M histamine (IC₅₀ = 40 nM) and reduces neutrophil influx in mouse peritonitis models (10 mg/kg s.c.). It also impairs eosinophil and lymphocyte influx into airways during allergic airway inflammation.^{2,3}

References

- 1. Thurmond, R.L., Desai, P.J., Dunford, P.J., et al. A potent and selective histamine H_A receptor antagonist with anti-inflammatory properties. J. Pharmacol. Exp. Ther. 309(1), 404-413 (2004).
- Dunford, P.J., O'Donnell, N., Riley, J.P., et al. The histamine H₄ receptor mediates allergic airway inflammation by regulating the activation of CD4⁺ T cells. J. Immunol. 176, 7062-7070 (2006).
- Cowden, J.M., Riley, J.P., Ma, J.Y., et al. Histamine H4 receptor antagonism diminishes existing airway inflammation and dysfunction via modulation of Th2 cytokines. Respir. Res. 11(86), (2010).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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