Product Data Sheet

Chemical Properties

Product Name: JNJ-7777120

Cas No.: 459168-41-3

M.Wt: 277.75

Formula: C14H16ClN3O

Chemical Name: (5-chloro-1H-indol-2-yl)-(4-methylpiperazin-1-yl)methanone

Canonical SMILES: CN1CCN(CC1)=O)C2=CC3=C(N2)C=CC(=C3)Cl

Solubility: Soluble in DMSO > 10 mM

Storage: Store at -20°C

General tips: For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shopping Condition: Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets: Neuroscience

Pathways: Histamine Receptor

Description:

IC50: A Histamine H4 receptor antagonist with IC50 of 4.5 nM. Histamine has been reported to play an important role in a large number of physiological processes. JNJ-7777120, the first potent and selective non-imidazole histamine H4 receptor antagonist with Ki of 4.5 nM, exhibits more than 1000-fold selectivity over the other histamine receptors. [1]

In vitro: It was reported that NJ 7777120 bound to the H4 receptor with a remarkably high affinity. It also demonstrated a greater selectivity over other histamine receptor antagonists.
Moreover, JNJ 7777120 selectively targeted to potent H4 rather than 50 other molecular targets. [2]

In vivo: JNJ 7777120 showed an oral bioavailability of about 30% in rats and 100% in dogs, with a half-life of around 3 h in both rats and dogs. It was reported to inhibit histamine-induced chemotaxis and calcium influx in mouse bone marrow-derived mast cells. In addition, in mice, JNJ 7777120 could suppress the histamine-induced migration of tracheal mast cells from the connective tissue to the epithelium. Moreover, JNJ 7777120 was demonstrated to notably inhibit neutrophil infiltration in a mouse zymosan-induced peritonitis model. [2]

Clinical trial: So far, no clinical trial has been conducted.

Reference:


Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.