Product Name: Astemizole

CAS No.: 68844-77-9
M.Wt: 458.57
Formula: C28H31FN4O

Chemical Name: 1-(4-fluorobenzyl)-N-(1-(4-methoxyphenethyl)piperidin-4-yl)-1H- benzimidazol-2-amine

Canonical SMILES: FC1=CC=C(C=C1)CN2C(NC3CCN(CCC(C=C4)=CC=C4OC)CC3)=NC5=CC=CC=C25

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: Astemizole is a potent anti-histamine compound that antagonizes the histamine H1-receptor with IC50 of 4 nM. It is also identified less potent at muscarinic acetylcholine receptors with Ki of 2.4 µM.
The histamine H1 receptor, a member of Rhodopsin-like G-protein-coupled receptors, is activated...
by the biogenic amine histamine and is expressed throughout the body, particularly in smooth muscles, on vascular endothelial cells, in the central nervous system, and in the heart. Astemizole targets imperative proteins included in tumor movement, to be specific, either à-go-go 1 (Eag1) and Eag-related quality (Erg) potassium channels. Moreover, Eag1 is thought to be an imperative marker for a few distinct tumors. Astemizole hinders Eag1 and Erg channel action, and in cells communicating the Eag1 channel it diminishes tumor cell expansion in vitro and in vivo. It ought to be noticed that some cardiovascular reactions have been reported for astemizole in a couple of uncommon cases. Nevertheless, astemizole remains as an extremely encouraging hostile to malignancy apparatus on the grounds that it shows anti-proliferative mechanisms, may serve as the basis to synthesize new anti-cancer agents, and has been previously administered clinically. [1]

Reference: