Product Data Sheet

Chemical Properties

**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-benzo[d]imidazol-2-amine  
**Canonical SMILES:** FC1=CC=C(C=C1)CN2C(NC3CCN(CCC(C=C4)=CC=C4OC)CC3)=NC5=CC=C5

**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:

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. Shortterm 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.