

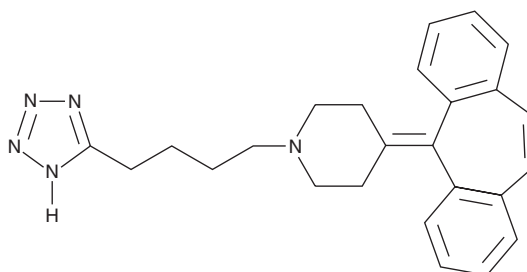
PRODUCT INFORMATION



AT-56

Item No. 13160

CAS Registry No.: 162640-98-4
Formal Name: 4-(5H-dibenzo[a,d]cyclohepten-5-ylidene)-1-[4-(2H-tetrazol-5-yl)butyl]-piperidine
MF: C₂₅H₂₇N₅
FW: 397.5
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

AT-56 is supplied as a crystalline solid. A stock solution may be made by dissolving the AT-56 in the solvent of choice, which should be purged with an inert gas. AT-56 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AT-56 in these solvents is approximately 30 mg/ml.

AT-56 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AT-56 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. AT-56 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AT-56 is a selective, competitive, and highly bioavailable inhibitor of lipocalin-type prostaglandin D synthase (L-PGDS) with a K_i value of 75 μM.¹ It inhibits the production of PGD₂ by L-PGDS-expressing cells purified from human CSF and recombinant mouse cells with an IC₅₀ value of 95 μM.¹ At concentrations as high as 100 μM *in vitro* or 30 mg/kg *in vivo*, AT-56 does not affect the production of PGE₂, PGF_{2α}, or H-PGDS-catalyzed PGD₂.¹ At 10 mg/kg AT-56, the numbers of total cells, infiltrating eosinophils, and monocytes in bronchoalveolar lavage fluid of L-PGDS transgenic mice were decreased to 23, 6, and 41% of controls, respectively.¹

Reference

1. Irikura, D., Aritake, K., Nagata, N., *et al.* Biochemical, functional, and pharmacological characterization of AT-56, an orally active and selective inhibitor of lipocalin-type prostaglandin D synthase. *J. Biol. Chem.* **284**(12), 7623-7630 (2009).

WARNING

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

SAFETY DATA

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/29/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM