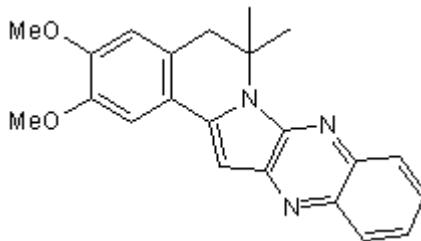


Certificate of Analysiswww.tocris.com**Product Name:** YM 90709**Catalog No.:** 1675**Batch No.:** 1

CAS Number: 163769-88-8

IUPAC Name: 5,6-Dihydro-2,3-dimethoxy-6,6-dimethylbenz[7,8]indolizino[2,3-*b*]quinoxaline**1. PHYSICAL AND CHEMICAL PROPERTIES****Batch Molecular Formula:** C₂₂H₂₁N₃O₂**Batch Molecular Weight:** 359.43**Physical Appearance:** Yellow solid**Solubility:** ethanol to 25 mM
DMSO to 50 mM**Storage:** Store at RT**Batch Molecular Structure:****2. ANALYTICAL DATA****TLC:** R_f = 0.58 (Dichloromethane:Methanol [19:1])**Melting Point:** Between 155 - 156°C**HPLC:** Shows >99.7% purity**¹H NMR:** Consistent with structure**Microanalysis:** Carbon Hydrogen Nitrogen

Theoretical 73.52 5.89 11.69

Found 73.4 5.94 11.63

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Product Information

Product Name: YM 90709**Catalog No.:** 1675**Batch No.:** 1

CAS Number: 163769-88-8

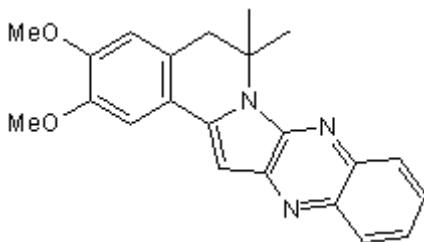
IUPAC Name: 5,6-Dihydro-2,3-dimethoxy-6,6-dimethylbenz[7,8]indolizino[2,3-*b*]quinoxaline**Description:**

Novel, selective inhibitor of interleukin-5 (IL-5) ($IC_{50} = 0.45 - 1$ mM). Inhibits IL-5-prolonged eosinophil survival and IL-5-induced tyrosine phosphorylation of JAK2 without inhibiting GM-CSF-mediated effects. Inhibits antigen-induced eosinophil and lymphocyte recruitment in rat airways *in vivo*, without affecting peripheral blood or bone marrow leukocytes.

Physical and Chemical Properties:Batch Molecular Formula: $C_{22}H_{21}N_3O_2$

Batch Molecular Weight: 359.43

Physical Appearance: Yellow solid

Minimum Purity: >99%**Batch Molecular Structure:****Storage:** Store at RT**Solubility & Usage Info:**ethanol to 25 mM
DMSO to 50 mM**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Morokata et al (2002) Characterization of YM-90709 as a novel antagonist which inhibits the binding of interleukin-5 to interleukin-5 receptor. *Int.Immunopharmacol.* **2** 1693. PMID: 12469943.

Morokata et al (2004) Effect of a novel interleukin-5 receptor antagonist, YM-90709 (2,3-dimethoxy-6,6-dimethyl-5,6-dihydrobenzo[7,8]indolizino[2,3-*b*]quinoxaline), on antigen-induced airway inflammation in BN rats. *Int.Immunopharmacol.* **4** 873. PMID: 15182727.

Morokata et al (2005) Effect of a novel interleukin-5 receptor antagonist, YM-90709, on antigen-induced eosinophil infiltration into the airway of BDF1 mice. *Immunol.Lett.* **98** 161. PMID: 15790522.

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