

Product Data Sheet

Product Name: Azoxystrobin

Cat. No.: GC46904

Chemical Properties

Cas. No. 131860-33-8

SMILES CO/C=C(C(OC)=O)\C(C=CC=C1)=C1OC2=NC=NC(OC3=C(C#N)C=CC=C3)=C2

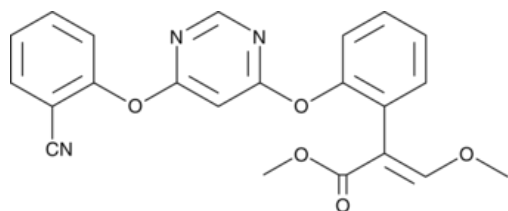
Formula C₂₂H₁₇N₃O₅ M.Wt 403.4

Solubility DMSO : 100 mg/mL (247.90 mM; Need ultrasonic) 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.

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

Structure



Background

Azoxystrobin is a broad-spectrum β -methoxyacrylate fungicide (LC₉₅s = <1 mg/L for ascomycete, basidiomycete, deuteromycete, and oomycete plant pathogens).¹ It inhibits mitochondrial respiration by binding to the Q₀ site of the cytochrome bc₁ complex and inhibiting electron transfer.²

Azoxystrobin is cytotoxic to MDA-kb2 cells with an EC₂₀ value of 2.9 μ M but has no antiandrogenic activity.³ It disrupts mRNA expression of antioxidant-, stress response-, and innate immune-related genes and induces the production of reactive oxygen species (ROS) in zebrafish larva when used at doses ranging from 0.1 to 100 μ g/L.⁴ Azoxystrobin inhibits proliferation of KYSE-150 human esophageal squamous cell carcinoma cells (IC₅₀ = 2.42 μ g/ml after 48 hours) and induces apoptosis in a time- and dose-dependent manner.⁵ In a KYSE-150 nude mouse xenograft model, azoxystrobin reduces tumor growth when administered at a dose of 40 mg/kg per day.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

1. Godwin, J.R., Anthony, V.M., Clough, J.M., et al. ICI A5504: A novel, broad spectrum, systemic β -methoxyacrylate fungicide. *Brit. Crop Prot. Conf. - Pests and Dis., Proc.* 1435-442 (1992)
2. Wiggins, T.E., and Jager, B.J. Mode of action of the new methoxyacrylate antifungal agent ICI A5504. *Biochem. Soc. Trans.* 22(1)68S (1994)
3. Orton, F., Rosivatz, E., Scholze, M., et al. Widely used pesticides with previously unknown endocrine activity revealed as in vitro antiandrogens. *Environ. Health Perspect.* 119(6)794-800 (2011)
4. Jiang, J., Shi, Y., Yu, R., et al. Biological response of zebrafish after short-term exposure to azoxystrobin. *Chemosphere* 20256-64 (2018)
5. Shi, X.K., Bian, X.B., Huang, T., et al. Azoxystrobin induces apoptosis of human esophageal squamous cell carcinoma KYSE-150 cells through triggering of the mitochondrial pathway. *Front. Pharmacol.* 8:277 (2017)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA