# PRODUCT INFORMATION



## Triclabendazole

Item No. 18883

CAS Registry No.: 68786-66-3

Formal Name: 6-chloro-5-(2,3-dichlorophenoxy)-2-

(methylthio)-1H-benzimidazole

Synonym:

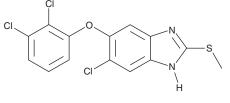
MF: C<sub>14</sub>H<sub>9</sub>Cl<sub>3</sub>N<sub>2</sub>OS

359.7 FW: ≥98% **Purity:** 

 $\lambda_{max}$ : 222, 254, 306 nm UV/Vis.: 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**

Triclabendazole is supplied as a crystalline solid. A stock solution may be made by dissolving the triclabendazole in the solvent of choice, which should be purged with an inert gas. Triclabendazole is soluble in the organic solvent DMSO at a concentration of approximately 10 mM.

#### Description

Triclabendazole is a benzimidazole anthelmintic. 1 It eliminates both immature and adult flukes in a sheep model of F. hepatica infection when administered at a dose of 10 mg/kg.<sup>2</sup> Triclabendazole (5 μΜ) also protects against glucose- or α-synuclein-induced apoptosis in S. cerevisiae via inhibition of adenylyl cyclase in the Ras-adenylyl cyclase-protein kinase A (PKA) nutrient sensing pathway.<sup>3</sup>

#### References

- 1. Shrifi, Y., Farahnak, A., Golestani, A., et al. Triclabendazole effect on protease enzyme activity in the excretory- secretory products of Fasciola hepatica in vitro. Iran. J. parasitol. 9(1), 107-113 (2014).
- 2. Smeal, M.G. and Hall, C.A. The activity of triclabendazole against immature and adult Fasciola hepatica infections in sheep. Aust. Vet. J. 60(11), 329-331 (1983).
- 3. Lee, Y.J., Burlet, E., Wang, S., et al. Triclabendazole protects yeast and mammalian cells from oxidative stress: Identification of a potential neuroprotective compound. Biochem. Biophys. Res. Commun. 414(1), 205-208 (2011).

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

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.

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### **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