

PRODUCT INFORMATION



Fenbendazole

Item No. 19687

CAS Registry No.: 43210-67-9

Formal Name: N-[6-(phenylthio)-1H-benzimidazol-2-yl]-carbamic acid, methyl ester

Synonym: Methyl 5-(phenylthio)-2-benzimidazolecarbamate

MF: $C_{15}H_{13}N_3O_2S$

FW: 299.3

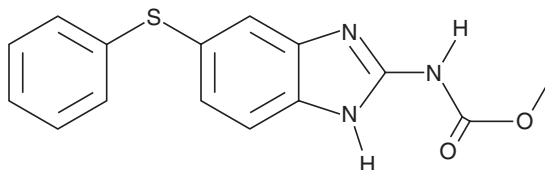
Purity: $\geq 98\%$

UV/Vis.: λ_{max} : 218, 296 nm

Supplied as: A crystalline solid

Storage: 4°C

Stability: ≥ 4 years



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

Laboratory Procedures

Fenbendazole is supplied as a crystalline solid. A stock solution may be made by dissolving the fenbendazole in the solvent of choice. Fenbendazole is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of fenbendazole in these solvents is approximately 10 mg/ml.

Description

Fenbendazole is a benzimidazole anthelmintic.¹ It is active against *Giardia in vitro* ($IC_{50} = 0.3 \mu M$). Fenbendazole (20 mg/kg) prevents infiltration of parasites into the brain in a rabbit model of *E. cuniculi* infection.² Fenbendazole also activates HIF-1 α and prevents oxidative stress-induced death in primary neurons *in vitro*.³

References

1. Morgan, U.M., Reynoldson, J.A., and Thompson, R.C.A. Activities of several benzimidazoles and tubulin inhibitors against *Giardia* spp. *in vitro*. *Antimicrob. Agents Chemother.* **37**(2), 328-331 (1993).
2. Suter, C., Müller-Doblies, U.U., Hatt, J.-M., *et al.* Prevention and treatment of *Encephalitozoon cuniculi* infection in rabbits with fenbendazole. *Vet. Rec.* **148**(15), 478-480 (2001).
3. Aleyasin, H., Karuppagounder, S.S., Kumar, A., *et al.* Antihelminthic benzimidazoles are novel HIF activators that prevent oxidative neuronal death via binding to tubulin. *Antioxid. Redox Signal.* **22**(2), 121-134 (2015).

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.

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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