

[Open Peer Review on Qeios](#)

Tolnaftate

National Cancer Institute

Source

National Cancer Institute. *Tolnaftate*. NCI Thesaurus. Code C47763.

A thiocarbamate derivative with either fungicidal or fungistatic property. Tolnaftate is a selective, reversible and non-competitive inhibitor of membrane-bound squalene-2,3-epoxidase, an enzyme involved in the biosynthesis of ergosterol. Inhibition leads to the accumulation of squalene and a deficiency in ergosterol, an essential component of fungal cell walls, thereby increasing membrane permeability, disrupting cellular organization and causing cell death. In addition, this agent may also distort the hyphae and stunts mycelial growth in susceptible fungi.