

[Open Peer Review on Qeios](#)

Fidaxomicin

National Cancer Institute

Source

National Cancer Institute. *Fidaxomicin*. NCI Thesaurus. Code C66979.

A narrow-spectrum, 18-membered macrolide antibiotic isolated from the actinomycete *Dactylosporangium aurantiacum* subsp. *hamdenensis* with potential antibacterial activity. Although the exact mechanism of action has yet to be fully elucidated, fidaxomicin may bind to and inhibit bacterial DNA-dependent RNA polymerase, thereby inhibiting the initiation of bacterial RNA synthesis. When orally administered, this agent is minimally absorbed into the systemic circulation, acting locally in the gastrointestinal tract. Fidaxomicin appears to be active against pathogenic Gram-positive bacteria, such as clostridia, enterococci, and staphylococci, but does not appear to be active against other beneficial intestinal bacteria.