

Open Peer Review on Qeios

## Donafenib

National Cancer Institute

## Source

National Cancer Institute. <u>Donafenib</u>. NCI Thesaurus. Code C118294.

An orally available multikinase inhibitor that targets Raf kinase and various receptor tyrosine kinases (RTKs), with potential antineoplastic activity. Upon oral administration, donafenib binds to and blocks the activity of Raf kinase, and inhibits Raf-mediated signal transduction pathways. This inhibits cell proliferation in Raf-expressing tumor cells. In addition, this agent may inhibit unidentified RTKs, and thus may further block tumor cell proliferation in susceptible tumor cells. Raf, a serine/threonine protein kinase, plays a key role in the Raf/mitogen-activated protein kinase kinase (MEK)/extracellular signal-regulated kinase (ERK) signaling pathway. Deregulation of this pathway often results in tumor cell proliferation and survival.

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