

[Open Peer Review on Qeios](#)

Ibrutinib

National Cancer Institute

Source

National Cancer Institute. *Ibrutinib*. NCI Thesaurus. Code C81934.

An orally bioavailable, small-molecule inhibitor of Bruton's tyrosine kinase (BTK) with potential antineoplastic activity. Upon oral administration, ibrutinib binds to and irreversibly inhibits BTK activity, thereby preventing both B-cell activation and B-cell-mediated signaling. This leads to an inhibition of the growth of malignant B cells that overexpress BTK. BTK, a member of the src-related BTK/Tec family of cytoplasmic tyrosine kinases, is required for B cell receptor signaling, plays a key role in B-cell maturation, and is overexpressed in a number of B-cell malignancies. The expression of BTK in tumor cells is also associated with increased proliferation and survival.