

[Open Peer Review on Qeios](#)

Xanthohumol

National Cancer Institute

Source

National Cancer Institute. *Xanthohumol*. NCI Thesaurus. Code C121950.

A prenylated flavonoid derived from the female flowers of the hops plant (*Humulus lupulus* L), with potential chemopreventive and antineoplastic activities. Upon administration, xanthohumol scavenges reactive oxygen species (ROS), thereby preventing DNA damage due to oxidative stress. In addition, xanthohumol is able to increase the expression of phase II cytoprotective enzymes, thereby inactivating carcinogens. This agent exerts anti-inflammatory activity, through the inhibition of inflammation-inducing enzymes, inhibits DNA synthesis, and induces apoptosis of susceptible cancer cells. Xanthohumol also decreases the expression of C-X-C chemokine receptor 4 (CXCR4), thereby preventing cancer cell invasion.