

[Open Peer Review on Qeios](#)

# Selenium

National Cancer Institute

## Source

National Cancer Institute. *Selenium*. NCI Thesaurus. Code C825.

A nonmetallic chemical element found in trace amounts in human body. Selenium primarily occurs in vivo as selenocompounds, mostly selenoproteins such as glutathione peroxidase and thioredoxin reductase (enzymes responsible for detoxification). Alone or in combination with Vitamin E, selenocompounds act as antioxidants. These agents scavenge free radicals; prevent blood clots by inhibiting platelet aggregation; strengthen the immune system; and have been shown, in some instances, to inhibit chromosomal damage and mutations. Exhibiting chemopreventive activity, selenocompounds also inhibit the induction of protein kinase C.