

[Open Peer Review on Qeios](#)

Pentobarbital Sodium

National Cancer Institute

Source

National Cancer Institute. *Pentobarbital Sodium*. NCI Thesaurus. Code C47662.

The sodium salt of pentobarbital, a short-acting barbituric acid derivative with central nervous system (CNS) depressant property. Pentobarbital sodium binds to the gamma-aminobutyric acid (GABA)-A subtype receptor, resulting in modulation of chloride transport through receptor channels and potentiation of GABA-induced increases in chloride conductance. This enhances postsynaptic responses to the inhibitory actions of GABA and causes CNS depression. In addition, this agent inhibits glutamate induced nerve depolarization and depresses voltage-activated calcium currents.