

[Open Peer Review on Qeios](#)

# Ticlopidine Hydrochloride

National Cancer Institute

## Source

National Cancer Institute. *Ticlopidine Hydrochloride*. NCI Thesaurus. Code C47756.

The hydrochloride salt form of ticlopidine, a thienopyridine derivative with anticoagulant property. Ticlopidine hydrochloride irreversibly inhibits adenosine-diphosphate (ADP)-induced platelet-fibrinogen binding by binding to the glycoprotein (GP) IIb/IIIa complex, one of the two purinergic receptors activated by ADP. Inhibition of the receptor activation causes the inhibition of adenylyl cyclase, results in decreased levels of cyclic adenosine monophosphate and thereby interferes with platelet membrane function and subsequent, platelet-platelet interaction, release of platelet granule constituents and prolongation of bleeding time.