

[Open Peer Review on Qeios](#)

# Thromboxane A2

National Cancer Institute

## Source

National Cancer Institute. *Thromboxane A2*. NCI Thesaurus. Code C122988.

An eicosanoid and short-lived intermediate product between prostaglandin endoperoxides and thromboxane B2, with prothrombotic and vasoconstrictive activities. Thromboxane A (TXA2) binds to its cognate receptor thromboxane A2 receptor (TBXA2R) and stimulates increased expression of glycoprotein IIb/IIIa (GPIIb/IIIa) on platelet membranes, which induces platelet activation and aggregation. Circulating fibrinogen binds to GPIIb/IIIa on platelet surfaces, which promotes clotting. TXA2 also binds to TBXA2R expressed by glomerular cells, which induces signaling pathways that promote vasoconstriction.