

[Open Peer Review on Qeios](#)

Fenoldopam

National Cancer Institute

Source

National Cancer Institute. *Fenoldopam*. NCI Thesaurus. Code C61759.

A benzazepine derivative with vasodilatory and antihypertensive properties. Fenoldopam, a dopamine (DA) receptor agonist, binds specifically to peripheral DA1 receptors and to alpha-2 adrenoceptors with moderate affinity. However, this agent exhibits no significant affinity to DA2, other alpha adrenergic, beta adrenergic, muscarinic, or serotonergic receptors. Receptor binding modulates the transmembrane flux of ions, thereby stimulating adenylate cyclase activity, as well as the release of prolactin. This results in vasodilatation, increased renal blood flow thereby enhancing natriuresis and diuresis leading to a lowering in diastolic blood pressure.