

[Open Peer Review on Qeios](#)

Panobinostat

National Cancer Institute

Source

National Cancer Institute. *Panobinostat*. NCI Thesaurus. Code C66948.

A cinnamic hydroxamic acid analogue with potential antineoplastic activity. Panobinostat selectively inhibits histone deacetylase (HDAC), inducing hyperacetylation of core histone proteins, which may result in modulation of cell cycle protein expression, cell cycle arrest in the G2/M phase and apoptosis. In addition, this agent appears to modulate the expression of angiogenesis-related genes, such as hypoxia-inducible factor-1alpha (HIF-1a) and vascular endothelial growth factor (VEGF), thus impairing endothelial cell chemotaxis and invasion. HDAC is an enzyme that deacetylates chromatin histone proteins.