

[Open Peer Review on Qeios](#)

Mocetinostat

National Cancer Institute

Source

National Cancer Institute. *Mocetinostat*. NCI Thesaurus. Code C62521.

A rationally designed, orally available, Class 1-selective, small molecule, 2-aminobenzamide HDAC inhibitor with potential antineoplastic activity. Mocetinostat binds to and inhibits Class 1 isoforms of HDAC, specifically HDAC 1, 2 and 3, which may result in epigenetic changes in tumor cells and so tumor cell death; although the exact mechanism has yet to be defined, tumor cell death may occur through the induction of apoptosis, differentiation, cell cycle arrest, inhibition of DNA repair, upregulation of tumor suppressors, down regulation of growth factors, oxidative stress, and autophagy, among others. Overexpression of Class I HDACs 1, 2 and 3 has been found in many tumors and has been correlated with a poor prognosis.