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# Domatinostat

National Cancer Institute

## Source

National Cancer Institute. *Domatinostat*. NCI Thesaurus. Code C96797.

An orally bioavailable benzamide and inhibitor of human class I histone deacetylases (HDACs) isoenzymes 1, 2 and 3, with potential antineoplastic activity. Domatinostat selectively binds to and inhibits class I HDACs leading to an accumulation of highly acetylated histones. This may result in an induction of chromatin remodeling, the selective transcription of tumor suppressor genes, and the tumor suppressor protein-mediated inhibition of tumor cell division and eventually the induction of tumor cell apoptosis. This may inhibit tumor cell proliferation in susceptible tumor cells. HDACs, upregulated in many tumor types, are a class of enzymes that deacetylate chromatin histone proteins.