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HDAC8 Inhibitor NBM-BMX

National Cancer Institute

Source

National Cancer Institute. *HDAC8 Inhibitor NBM-BMX*. NCI Thesaurus. Code C159496.

An orally bioavailable inhibitor of histone deacetylase (HDAC) type 8 (HDAC8; HDAC-8), with potential antineoplastic activity. Upon administration, NBM-BMX targets and inhibits the activity of HDAC8. This results in an accumulation of highly acetylated chromatin histones, chromatin remodeling, and selective transcription of tumor suppressor genes, ultimately promoting cell-cycle arrest and induction of tumor cell apoptosis. HDAC8, a class 1 histone deacetylase, plays a key role in transcriptional regulation and cell cycle progression. Aberrant expression of HDAC8 or deregulated interactions with transcription factors may contribute to tumorigenesis. Isotype-selective HDAC inhibitors may be associated with fewer adverse effects compared to pan-HDAC inhibitors.