

[Open Peer Review on Qeios](#)

P53-HDM2 Interaction Inhibitor MI-773

National Cancer Institute

Source

National Cancer Institute. *p53-HDM2 Interaction Inhibitor MI-773*. NCI Thesaurus. Code C106120.

An orally available spiro-oxindole HDM2 (human double minute 2) antagonist with potential antineoplastic activity. Upon oral administration, the p53-HDM2 protein-protein interaction inhibitor MI-773 binds to HDM2, preventing the binding of the HDM2 protein to the transcriptional activation domain of the tumor suppressor protein p53. By preventing this HDM2-p53 interaction, the proteasome-mediated enzymatic degradation of p53 is inhibited and the transcriptional activity of p53 is restored, which may result in the restoration of p53 signaling and lead to the p53-mediated induction of tumor cell apoptosis. HDM2, a zinc finger protein and a negative regulator of the p53 pathway, is often overexpressed in cancer cells. It has been implicated in cancer cell proliferation and survival.