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Nutlin-3a

National Cancer Institute

Source

National Cancer Institute. *Nutlin-3a*. NCI Thesaurus. Code C74594.

A small molecule and MDM2 (murine double minute 2) inhibitor, with potential antineoplastic activity. In cancer cells, nutlin-3a antagonizes the binding of MDM2 to p53, thereby preventing MDM2-mediated p53 degradation. This results in stabilizing and activating p53-dependent cell cycle arrest and apoptosis. The protein MDM2, a negative regulator of p53 activity, is overexpressed in many cancer cell types; the tumor suppressor p53 is mutated or deleted in about 50% of all cancers but active in the other 50%.