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# Daporinad

National Cancer Institute

## Source

National Cancer Institute. *Daporinad*. NCI Thesaurus. Code C67043.

A small molecule with potential antineoplastic and antiangiogenic activities. Daporinad binds to and inhibits nicotinamide phosphoribosyltransferase (NMPRTase), inhibiting the biosynthesis of nicotinamide adenine dinucleotide (NAD<sup>+</sup>) from niacinamide (vitamin B3), which may deplete energy reserves in metabolically active tumor cells and induce tumor cell apoptosis. In addition, this agent may inhibit tumor cell production of vascular endothelial growth factor (VEGF), resulting in the inhibition of tumor angiogenesis. The coenzyme NAD<sup>+</sup> plays an essential role in cellular redox reactions, including the redox reaction linking the citric acid cycle and oxidative phosphorylation.