Open Peer Review on Qeios

MYC-targeting siRNA DCR-MYC

National Cancer Institute

Source

National Cancer Institute. <u>MYC-targeting siRNA DCR-MYC</u>. NCI Thesaurus. Code C115108.

A lipid nanoparticle-based formulation consisting of small-interfering RNAs (siRNAs) directed against the oncogene c-Myc encapsulated in lipids with potential antineoplastic activity. Upon intravenous administration of MYC-targeting siRNA DCR-MYC, the lipid formulation promotes the uptake by tumor cells where the siRNAs moieties are subsequently released. The siRNAs bind to c-Myc mRNAs, which may result in the inhibition of translation and expression of the c-Myc protein and leads to growth inhibition for tumor cells that are overexpressing c-Myc. c-Myc, a proto-oncogene overexpressed in a variety of cancers, is involved in cellular proliferation, differentiation, and apoptosis.