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Thioredoxin-1 Inhibitor PX-12

National Cancer Institute

Source

National Cancer Institute. Thioredoxin-1 Inhibitor PX-12. NCI Thesaurus. Code C74082.

An orally bioavailable small molecule with potential antineoplastic activity. Thioredoxin-1 inhibitor PX-12 irreversibly binds to thioredoxin-1 (Trx-1) and inhibits its activity, which may result in growth inhibition and the induction of apoptosis. Overexpressed in many cancer cell types, the low molecular weight redox protein Trx-1 regulates transcription factor activity and inhibits apoptosis, promoting cell growth and survival; it also interacts with growth factors extracellularly to stimulate cell growth.