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# Nifurtimox

National Cancer Institute

## Source

National Cancer Institute. *Nifurtimox*. NCI Thesaurus. Code C71734.

A nitrofuran derivative with antiprotozoal and potential antineoplastic activities.

Nifurtimox is reduced by cytosol enzymes or flavin-containing microsomal enzymes to a highly reactive nitro anion free radical; autooxidation of the nitro anion free radical generates cytotoxic superoxide anion ( $O_2^-$ ). In addition, nifurtimox-derived nitro anion free radicals may alkylate macromolecules such as nucleic acids and proteins, resulting in the disruption of their structure and function.