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# Mangafodipir Trisodium

National Cancer Institute

## Source

National Cancer Institute. *Mangafodipir Trisodium*. NCI Thesaurus. Code C66053.

The trisodium salt of mangafodipir with potential antioxidant and chemoprotective activities. Consisting of manganese (II) ions chelated to fodipir (dipyridoxyl diphosphate or DPDP), mangafodipir scavenges oxygen free radicals such as superoxide anion, hydrogen peroxide, and hydroxyl radical, potentially preventing oxygen free radical damage to macromolecules such as DNA and minimizing oxygen free radical-related chemotoxicity in normal tissues. However, this agent may potentiate the chemotherapy-induced generation of oxygen free radicals in tumor cells, resulting in the potentiation of chemotherapy-induced cytotoxicity; tumor cells, with higher levels of reactive oxygen species than normal cells, possess a lower threshold for oxygen free radical-mediated cytotoxicity. Mangafodipir is traditionally used as an imaging agent in magnetic resonance imaging (MRI).