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MnSOD Mimetic BMX-001

National Cancer Institute

Source

National Cancer Institute. *MnSOD Mimetic BMX-001*. NCI Thesaurus. Code C125666.

A third generation, cationic, lipophilic, manganese (Mn) and porphyrin-based mimetic of the human mitochondrial manganese superoxide dismutase (MnSOD), with antioxidant and potential chemoprotective activities. Upon administration, MnSOD mimetic BMX-001 is internalized by cells and mimics the activity of MnSOD by scavenging reactive oxygen species (ROS), such as superoxide anion, hydrogen peroxide, and hydroxyl radical. This prevents oxidative damage to macromolecules such as DNA and minimizes oxygen free radical-related chemotoxicity in normal tissues. This agent was designed to be more lipophilic and less toxic than first and second generation Mn-porphyrin mimetics.