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Rhodacyanine Analog MKT-077

National Cancer Institute

Source

National Cancer Institute. *Rhodacyanine Analog MKT-077*. NCI Thesaurus. Code C2731.

A synthetic heterocyclic pyridinium compound. MKT-077 is a water soluble lipophilic cationic molecule and an analog of rhodacyanine dye, which partitions into tumor cell mitochondria where it is thought to act as a metabolic poison, leading to G1 arrest and apoptosis. This agent also shows selective cytotoxicity to cancer cells mediated by its binding to the hsp70 family protein mot-2 and reactivation of tumor suppressor p53 function.