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Ansamycin Antineoplastic Antibiotic

National Cancer Institute

Source

National Cancer Institute. *Ansamycin Antineoplastic Antibiotic*. NCI Thesaurus. Code C1003.

An antineoplastic antibiotic of macrocyclic benzoquinone isolated from the bacterial genus *Streptomyces*. Ansamycin antibiotics bind to and inhibit the cytosolic chaperone functions of heat shock protein 90 (HSP90). HSP90 maintains the stability and functional shape of many oncogenic signaling proteins and the inhibition of HSP90 promotes the proteasomal degradation of oncogenic signaling proteins that may be over-expressed or overactive in tumor cells.