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# IAP Inhibitor APG-1387

National Cancer Institute

## Source

National Cancer Institute. *IAP Inhibitor APG-1387*. NCI Thesaurus. Code C162535.

A small molecule, second mitochondria-derived activator of caspases (SMAC)-mimetic targeting inhibitor of apoptosis proteins (IAPs) with potential apoptosis-inducing and antineoplastic activities. Upon administration, IAP inhibitor APG-1387 selectively binds to and inhibits the activity of IAPs including X chromosome-linked IAP (XIAP) and cellular IAPs 1 (c-IAP1) and 2 (c-IAP2). This may restore and promote the induction of apoptosis through apoptotic signaling pathways and enhance proteasomal degradation of IAPs. Additionally, APG-1387 may work synergistically with cytotoxic drugs to overcome tumor cell resistance to apoptosis. IAPs are overexpressed by many cancer cell types, suppressing apoptosis by binding and inhibiting active caspases-3, -7 and -9 via their BIR (baculoviral IAP repeat) domains.