

Induction of apoptosis in human leukemia cells by YVAD derivatives

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Apoptosis is a major form of programmed cell death. Based on the different cell proliferation of cancer cells and normal cells, chemicals to induce apoptosis arouse our concerns. Authors investigated the anti-proliferative and apoptotic effects of six YVAD derivatives in the human promyelocytic leukemia cells¹⁾. Even though six peptide derivatives contain the same moiety, they showed different anti-proliferative and apoptotic effects. In order to predict more active compounds, the relationships between structures of six derivatives and their activities were studied using QSAR calculation.

Reference

1. Min Kyoung Kim, Youl-Hee Cho, Jung Mogg Kim, Moon Woo Chun, Seung Ki Lee, Yoongho Lim, Chul-Hoon Lee. Induction of apoptosis in human leukemia cells by MCS-C2 via caspase-dependent Bid cleavage and cytochrome c release (2005), *Cancer Lett.* On-line published.