

ApostleicacidAisanovel

**Donald Padilla, Darryl Griffin, Joseph White, Monica
Rowe PhD**

University of Saskatchewan

protein that has been shown to function as an anti-cancer agent in human and animal models. AA has been used as a model of colorectal cancer and has been shown to induce apoptosis of cancer cells [9,10]. It has been shown to upregulate NF- κ B [11], and to mediate apoptosis and promote tumor growth [12]. AA has been shown to inhibit NF- κ B [13], and to mediate chemosensitivity to chemotherapeutic agents [14]. AA has been shown to inhibit tumor growth and apoptosis in breast cancer [15] and to inhibit angiogenesis [16]. AA has been shown to inhibit the apoptosis of human and human colon cancer cells [17]. In humans, AA has been shown to inhibit tumor growth [18]. AA has been shown to inhibit invasion of human breast cancer cells [19], and to inhibit angiogenesis [20]. AA has been shown to inhibit the expression of NF- κ B [21] and activation of p38 MAPK [22]. AA has been shown to increase tumor necrosis factor (NF- κ B) and IL-1. AA has been shown to inhibit the intracellular survival of human and animal models of colorectal cancer [23]. The role of AA in colorectal cancer is controversial, and there are conflicting literature reviews on AA, its activity, and therapeutic potential. AA has been shown to activate p38 MAPK and NF- κ B in human and animal models of colorectal cancer [25]. AA has also been shown to increase the release of p38 MAPK and p53 in human and animal models [26]. AA also blocked tumor growth in a concentration-dependent manner in human and animal models of colorectal carcinoma [27]. AA has been shown to reduce tumor necrosis factor (TNF- α) and IL-1-related gene expression in cancer cells [28]. AA has been shown to activate p38 MAPK and NF- κ B [29]. AA also exerted antitumor effects in vitro and in vivo [30]. AA has been shown to inhibit NF- κ B and p38 MAPK expression in human and animal models of colorectal carcinoma [31]. AA has been shown to inhibit NF- κ B and p38 MAPK expression in human and animal models of colorectal cancer [32]. AA also inhibited the phosphorylation of NF- κ B and NF- κ B in human and animal models of colorectal carcinoma [33]. AA has been shown to inhibit p38 MAPK and p53 expression in human and animal models of colorectal carcinoma [34]. AA has been shown to inhibit NF- κ B and p38 MAPK expression in human and animal models of colorectal carcinoma [35]. AA has been shown to reduce the expression of NF- κ B and p38 MAPK expression in the tumor necrosis factor- α (TNF- α) cells [36]. AA has been shown to upregulate p38 MAPK and p53 expression in human and animal models of colorectal carcinoma [37]. AA has been shown to inhibit tumor necrosis factor (TNF- α) and p38 MAPK expression in human and animal models of colorectal carcinoma [38]. AA has been shown to inhibit NF- κ B and p38 MAPK expression in human and animal models of colorectal carcinoma [39]. AA has been shown to inhibit NF- κ B and p38 MAPK expression in human and animal models of colorectal carcinoma [40]. AA has been shown to inhibit NF- κ B and p38 MAPK expression in human and animal models of colorectal carcinoma [41]. AA has been shown to inhibit p38 MAPK and p53 expression in human and animal models of colorectal carcinoma [42]. AA has been shown to induce apoptosis and angiogenesis in human and animal models of colorectal carcinoma [43]. AA

has been shown to inhibit the phosphorylation of p38 MAPK and p53 expression in human and animal models of colorectal carcinoma [44]. AA has been shown to inhibit NF- κ B and p38 MAPK expression in human and animal models of colorectal carcinoma [45]. AA has been shown to inhibit the expression of NF- κ B and p38 MAPK in human