ZSTK474 is an inhibitor of PI3K that exhibits anticancer chemotherapeutic, anti-inflammatory, and anti-arthritis activities. ZSTK474 suppresses expression of matrix metalloproteinases (MMPs), VEGF, and HIF-1α, inhibiting migration, invasion, and adhesive capability of prostate cancer cells. ZSTK474 also induces G1 phase cell cycle arrest without inducing apoptosis in vitro and inhibits tumor growth in vivo. ZSTK474 inhibits the production of prostaglandin E2 (PGE2) in fibroblast-like synovial cells in vitro. In vivo, this compound decreases production of IFN-γ and IL-17, decreases the number of circulating T cells, and inhibits the progression of arthritis.

References
