Tyrphostin AG490 inhibits JAK2 and exhibits anti-diabetic, anti-atherosclerotic, immunosuppressive, and anticancer activities. Tyrphostin AG490 inhibits joint inflammation in vivo by suppressing activation of STAT3, production of TNF-α and RANKL, and differentiation of osteoclasts. Tyrphostin AG490 also induces programmed cell death and inhibits invasion and adhesion of leukemia cells. In animal models of atherosclerosis, tyrphostin AG490 decreases activity and expression of Nox and levels of CD68, decreasing the formation of atherosclerotic lesions. Additionally, tyrphostin AG490 increases expression of PPARγ and decreases blood glucose levels in vivo, preventing the onset of autoimmune type 1 diabetes. This compound also inhibits expression of MCP-1, IFNγ, and MHC class II, decreases infiltration of T cells and macrophages, and suppresses deposition of IgG in animal models of lupus nephritis. Tyrphostin AG490 may also inhibit EGFR.

References


Caution: This product is intended for laboratory and research use only. It is not for human or drug use.