Tranilast is an inhibitor of transient receptor potential vanilloid 2 (TRPV2) channels and PDGFRs; it is also a mast cell stabilizer. Tranilast exhibits anti-allergic, anti-fibrotic, immunomodulatory, anti-angiogenic, anti-metastatic, and anticancer chemotherapeutic activities. In animal models of fibrosis, tranilast inhibits mast cell filtration and decreases levels of α-SMA, collagen I, fibronectin, stem cell factor, and c-kit. In other animal models, this compound decreases allograft rejection and induces T cell anergy by increasing expression of p21 and p51, decreasing levels of IL-2, and stimulating cell cycle arrest. In cellular and animal models of breast cancer, tranilast induces G1/S phase cell cycle arrest, decreases levels of TGF-β1 and endoglin, increases levels of p53 and activation of caspase 3 and PARP, and inhibits cell migration, cell proliferation, and tumor growth. In vitro, tranilast inhibits VEGF- and FGF-induced cell proliferation, migration, and tube formation.

References


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