Piceatannol is a polyphenolic hydroxystilbene derivative of resveratrol with increased bioavailability and bioactivity compared to its parent compound. Piceatannol exhibits pro-angiogenic, anticancer, antioxidative, and anti-obesity properties. Piceatannol directly inhibits HIF-prolyl hydroxylase-2 (HPH-2), increasing levels of HIF-1α, VEGF, and heme oxygenase-1 (HO1). When complexed with copper (II), the piceatannol-Cu complex increases ROS levels and damages DNA. Additionally, piceatannol suppresses nuclear translocation of p65 and p50, preventing activation of NF-kB and downregulating expression of matrix metalloproteinase 9 (MMP9). Piceatannol also downregulates phosphorylation of Akt in prostate cancer cells. In other in vitro models, this compound increases levels of tissue inhibitor of metalloproteinase 2 (TIMP2) and inhibits phosphorylation of STAT3; it also downregulates Bcl-xl and inhibits phosphorylation of JNK. Piceatannol also downregulates phosphorylation of Akt in prostate cancer cells. In other in vitro models, this compound increases levels of tissue inhibitor of metalloproteinase 2 (TIMP2) and inhibits phosphorylation of STAT3; it also downregulates Bcl-xl and inhibits phosphorylation of JNK. Piceatannol also downregulates phosphorylation of Akt in prostate cancer cells. In other in vitro models, this compound increases levels of tissue inhibitor of metalloproteinase 2 (TIMP2) and inhibits phosphorylation of STAT3; it also downregulates Bcl-xl and inhibits phosphorylation of JNK. Piceatannol also downregulates phosphorylation of Akt in prostate cancer cells. In other in vitro models, this compound increases levels of tissue inhibitor of metalloproteinase 2 (TIMP2) and inhibits phosphorylation of STAT3; it also downregulates Bcl-xl and inhibits phosphorylation of JNK. Piceatannol also downregulates phosphorylation of Akt in prostate cancer cells. In other in vitro models, this compound increases levels of tissue inhibitor of metalloproteinase 2 (TIMP2) and inhibits phosphorylation of STAT3; it also downregulates Bcl-xl and inhibits phosphorylation of JNK. Piceatannol also downregulates phosphorylation of Akt in prostate cancer cells. In other in vitro models, this compound increases levels of tissue inhibitor of metalloproteinase 2 (TIMP2) and inhibits phosphorylation of STAT3; it also downregulates Bcl-xl and inhibits phosphorylation of JNK. Piceatannol also downregulates phosphorylation of Akt in prostate cancer cells. In other in vitro models, this compound increases levels of tissue inhibitor of metalloproteinase 2 (TIMP2) and inhibits phosphorylation of STAT3; it also downregulates Bcl-xl and inhibits phosphorylation of JNK.

References


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