Gefitinib is an anticancer chemotherapeutic compound that inhibits mutant isoforms of EGFR. Across a variety of cancer cell lines, gefitinib increases poly(ADP)-ribose polymerase (PARP) cleavage and apoptosis, resulting in inhibition of cell growth. Gefitinib also induces expression of PPARγ in cellular models, likely through activation of transcription factor CCAT/enhancer binding protein β (CEBP-β). Gefitinib’s inhibition of EGFR also results in inhibition of heat shock protein 70 (HSP70), which can exacerbate pulmonary fibrosis. Additionally, gefitinib increases phosphorylation of p38 MAPK and JNK, inducing apoptosis in keratinocytes. This compound also promotes differentiation of acute myelogenous leukemia cells in vitro.

References


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