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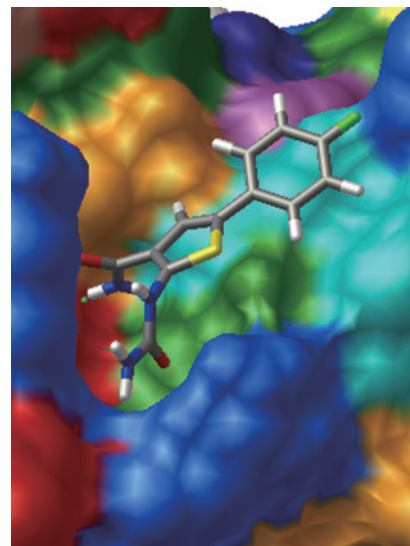
STAT3 and NF- κ B signaling pathways are often simultaneously activated in neoplastic cells and play important roles in tumorigenesis and drug sensitivity. TPCA-1, a previously found antagonist of IKKs, blocks STAT3 anchoring to upstream tyrosine kinase and inhibits STAT3 activation induced by cytokines and c-Src. Molecular modeling indicates that TPCA-1 is well docked into SH2 domain of STAT3 and formed hydrogen bond with Glu594. As a direct inhibitor of STAT3 and IKKs, TPCA-1 inhibits growth of non-small cell lung cancer (NSCLC) with EGFR mutation and potentiates the antitumor effect of gefitinib. For details, see article by Nan and colleagues on page 617.

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Molecular Cancer Therapeutics

13 (3)

Mol Cancer Ther 2014;13:555-764.

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