F93-A: A Inhibitor of Farnesyl Protein Transferase from Aspergillus fumigatus KL93

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Mutated forms of the ras oncogenes are associated with about 30% of human tumors. The ras genes encode 21KDa proteins, called p21 or Ras, that are associated with the plasma membrane. FPTase is a dimeric enzyme that catalyses the transfer of the farnesyl group from farnesyl pyrophosphate onto cysteine 186 at the C-terminus of the Ras protein. This is mandatory process for triggering ras oncogene toward tumor formation. Therefore, selective inhibitors of FPTase have the potential to be used as antitumorgenic agents.

The compound F93-A was isolated from a culture broth of *Aspergillus fumigatus* F93, isolated from soils in Taejon, Korea. The compound was purified by SiO₂ column chromatography, and reverse phase HPLC. The structure of F93-A was determined by NMR experiments.