

O-25: ANTICANCER CHROMOPROTEIN PRODUCED BY *ACTINOMADURA* SP., STRAIN 21G792

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A chromoprotein (**1**) with anticancer activity is isolated from the culture broth of *Actinimadura* sp., strain 21G792. The chromoprotein (**1**) shows potent activity against a panel of cancer cells and exhibits marked efficacy in xenograft models in mice. Structurally, **1** is a 1:1 complex of a 12,924 Da apoprotein and an enediyne-containing small molecule, termed chromophore. The chromophore belongs to a known class of anticancer agents that cause cleavage of DNA. The chromophore readily decomposes in free form and is stabilized by non-covalent binding to the apoprotein. In this presentation, the production, structure, and anticancer activity of **1** are reported.