

Antitumor There is notable anticancer therapeutic potential for actinomycetes, especially those whose products are associated with minimal side effects compared to conventional chemotherapy, for instance the compound salinosporamide A [127]. These hybrid BGCs and CGCs are prospective sources of novel secondary metabolites and chemotherapeutic agents for pharmaceuticals. Marine actinomycin compounds with antitumor potential include streptochlorin, actinofuranones, aureovercillactam, chalocomycin B, cyanosporasides, komodoquinones, nonactin, resitoflavine, sporolides, tetracenomycin D, thiocoraline, t-muurolol, butenolides, echinosporins, and streptokordin. Ketomycin suppressed cellular migration and invasion in breast carcinoma cells, inhibited NF- κ B activity used in upstream signaling by hindering the autophosphorylation of IKK- α /IKK- β , and minimized the 3D-invasion of breast carcinoma cells at nontoxic concentrations [130]. Important secondary metabolites from marine actinomycetes with antitumor potential include streptopyrrolidine, cyclo-(L-Pro-L-Met), streptochlorin, lynamycins, marizomib, and thiocoraline [128]. Two examples of novel anticancer metabolites are the compound extracts ULDF4 and ULDF5 derived from *Streptomyces* strains found at Lagos. These drugs were obtained from *Streptomyces verticillus*, *Streptomyces peucetius*, *Streptomyces caespitosus*, and other intra-generic isolates [107].