Abstract

There is provided a novel series of synthetic analogs of hGH-RH(1-29)NH₂ (SEQ ID NO: 1) and hGH-RH(1-30)NH₂. Of particular interest are those carrying PhAc, N-Me-Aib, Dca, Ac-Ada, Fer, Ac-Amc, Me-NH-Sub, PhAc-Ada, Ac-Ada-D-Phe, Ac-Ada-Phe, Dca-Ada, Dca-Amc, Nac-Ada, Ada-Ada, or CH₂(CH₂)₁₀-CO-Ada, at the N-Terminus and β-Ala, Amc, Apa, Ada, AE₂₄₄, ε-Lys(α-NH₂), Agm, Lys(Oct) or Ahx, at the C-terminus. These analogs inhibit the release of growth hormone from the pituitary in mammals as well as inhibit the proliferation of human cancers, and inhibit the hyperplastic and benign proliferative disorders of various organs, through a direct effect on the cancerous and non-malignant cells. The stronger inhibitory potencies of the new analogs, as compared to previously described ones, result from replacement of various amino acids.