幼ハムスター腎細胞(BHK-21)の増殖に対する朝鮮人参ペプチドの影響

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Effect of a Peptide from *Panax ginseng* on the Proliferation of Baby Hamster Kidney-21 Cells

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Abstract An alkaline fraction separated by ion exchange chromatographies from the water extract of *Panax ginseng* root stimulated the proliferation of baby hamster kidney-21 cells. Separation of the alkaline fraction by MCI-gel CHP 20P column chromatography followed by dialysis provided an active material. By a reversed-phase HPLC the active material was separated into six fractions, and an active colorless compound 1 was obtained from fraction 2 in a pure state. Compound 1 was composed of the following amino acids, Gly, Arg, Glu, Val in a ratio of 1:1:1:1, and caused 20% enhancement of proliferation of BHK-21 cells at a concentration of 3.40 μM. On the basis of physical and spectral data the structure of compound 1 was established as a tetrapeptide, Gly-Arg-γ-Glu-Val-NH_2.

幼ハムスター腎細胞(BHK-21)の増殖に対する朝鮮人参水エキスより得られたペプチドの影響を検討した。本化合物は各種物理化学的方法とアミノ酸の分析・シーケンサー分析結果より、塩基性テトラペプチド、Gly-Arg-γ-Glu-Val-NH_2であると決定した。このテトラペプチドの細胞増殖活性は3.40 μMの濃度で20%の上昇を示した。

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