

A human placental hormone (UTPH) with uterine growth and DNA promoting effects

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A human placental protein previously described is studied in order to expand its biological characterization. Dose response curve of its action on uterine growth of prepuberal mice showed to be a significant logarithmic function and this effect is neutralized by its specific antiserum. It is also demonstrated that the uterine growth promoting effect is not due either to estrogen, protein bound estrogen, progesterone or chorionic gonadotrophin. Experimental evidence is given to demonstrate that the mechanism of action of this placental protein is to stimulate the synthesis and to increase the concentration of DNA in uterine tissue, differing then in this respect from the effect of estrogen. Previous work has shown that this placental protein is present in full term placentas within similar ranges as HCG and HPL. It is also detected in blood during pregnancy and acts biologically in at least two target organs: uterus and mammary gland. Therefore the name of uterotrophic placental protein