

Oviduct specific expression of human recombinant leptin in chicken

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In this study, first time we have been successful to show the expression of human recombinant leptin in chicken. We constructed pL-eGFP, pL-leptinGFP and pL-2.8OVleptinGFP vectors and cultured 293FT chicken embryo fibroblasts, chicken primordial germ cells, Hela C127 cells, and oviduct epithelial cells. All vectors were expressed in the transfected cells, except pL-2.8OVleptinGFP vector, which was only expressed in oviduct epithelial cells. A lentivirus with pL-2.8OVleptinGFP was injected in fertilized eggs; 10 chicks hatched in the G0 generation, four of them carried the leptinGFP sequences. We concluded that by using an oviduct-specific vector for transfection, human recombinant leptin protein can be expressed in the oviducts of laying hens and it was also found that character is transmittable and can be reproduced with a need for repeated transfection.

Biography

Hubdar Ali Kaleri has completed his Ph.D. studies from Nanjing Agricultural University China at the age of 31 years. Since March 2006, he has been working as Assistant Professor, Department of Animal Breeding and Genetics, Faculty of Animal Husbandry and Veterinary Sciences, Sindh Agriculture University Tandojam 70060, Hyderabad Sindh Pakistan. He has published 19 research papers in well reputed journals and also participated in more than 11 international conferences, training workshops and seminars.

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