ALT STUDY OF TRANSFECTION OF BLV CONTAINING DNA INTO NIH/3T3 CELLS

Č.Altaner, J.Bán, V.Zajac, R.Kettmann[1] and A.Burny[1]
Cancer Research Institute Slovak Academy of Sciences, 812 32 Bratislava, Czechoslovakia, [1]Department de Biologie Moléculaire, Université Libre de Bruxelles, 1640 Rhode St Génese, Belgium.

The transformation of NIH/3T3 cells after transfection with BLV containing DNA isolated from various virus productive cell clones (FLK cell line) has been investigated. Two samples of DNA isolated from the highly productive cell line FLK containing 4 BLV proviruses out of seven were able to transform NIH/3T3 cells. From the transformed cells, single-cell clones were isolated. The chromosomal DNA isolated from transformants was analyzed by Eco RI restriction. Fragments obtained after blotting to a nitrocellulose filter were hybridized with labelled BLV specific probe. In 4 DNAs isolated from transformants out of 33 samples examined, the BLV specific fragments were detected. Restriction analysis of the BLV specific sequences detected revealed that just a part of the genome was present, and the sequences were probably rearranged. The DNA isolated from transformants was able to induce the NIH/3T3 transformation again. The BLV specific sequences in secondary transformants were not detected.

ALT INFECTIVITY OF AVIAN MYELOCYTOMATOSIS VIRUS IN RATS: CHARACTERIZATION OF SERA FROM INFECTED RATS

V.Altanerová, J.Forchhammer[1] and Č.Altaner
Cancer Research Institute Slovak Academy of Sciences, 81232 Bratislava, Czechoslovakia; [1]The Fibiger Institute, 2100 Copenhagen, Denmark.

We have previously described the infectivity of MC29 virus in adult rats. The combination of virus inoculation via the mesentheric vein with chemical treatment and partial hepatectomy was used. The presence of the infectious virus in rat tissues was proved by the cocultivation of rat spleen cells with chicken embryo cells. Inoculation of the cocultivated material into the chickens gave rise to tumours. Localization of the induced tumours and their pathomorphology was typical for myelocytomatosis virus infection in chickens.

Sera from MC29 infected rats were analyzed for antibodies against the myc gene product. From 156 rat sera tested six recognized proteins not precipitated by preimmune sera. The specificity of these antibodies has been analysed.

ARN EFFICACY OF CLINICALLY USED DRUGS AND DRUG COMBINATIONS AGAINST HUMAN GASTROINTESTINAL TUMOURS XENOGRAFTED INTO NUDE MICE

W.Arnold, H.Naundorf, G.P Wildner, W.Seifart and St.Tanneberger
Central Institute of Cancer Research, 1115 Berlin, G.D.R.

Human adenocarcinomas of the gastrointestinal tract (stomach, colon, rectum) served as donor materials and BALB/c-nu/nu mice as recipients. To investigate the heterogeneity of the tumours, several lines originating from the same donor tumour were established. The tests gave different take rates in spite of the use of histologically comparable grafts. The transplantable lines showed maintenance of morphological and functional characteristics during numerous generations. Using s.c. and SRC (subrenal capsule) techniques the efficacy of clinically active drugs and drug combinations was evaluated. The results emphasized the qualification of the models for preclinical testing. In the case of combination chemotherapy, the superiority of the CTX/Ft combination to CCNU/Ft using maximum tolerated dosages was demonstrated.
