

been subcultured over 100 times, have averaged 5.3 population doublings per passage since their 13th subculture, have a mean population doubling time of 12.5 h, grow on 25-cm² plastic growth surfaces to a population density of 4.5×10^5 to 5.5×10^5 cells/cm², exhibit an absolute plating efficiency exceeding 45%, and have retained ferret-specific antigens and possess isozymes that are electrophoretically similar to those present in ferret liver.

The chromosomes of the Mpf cells have been analyzed by Jenkins et al. (16). Although Frykman's (2) skin cell cultures became tetraploid within 24 passages, the preliminary findings of Jenkins et al. [(16) and personal communication] demonstrated that the Mpf cells at their 119th passage retained a modal chromosome number equivalent to the ferret's diploid chromosome number of 40 and that the chromosomes of these Mpf cells exhibited C bands and possessed nucleolar organizer regions.

The Mpf cells' chromosome number being equivalent to the ferret's diploid chromosome number is unusual inasmuch as long-term cultivation of mammalian cells in vitro results frequently in heteroploidy (17,18). Although more detailed cytogenetic analyses have revealed that these Mpf cells possess altered chromosomes (16), the cells' ability to grow indefinitely upon continuous cultivation suggests that heteroploidy is not required for ferret cells to acquire an infinite growth potential. The inability of these Mpf cells to form colonies in agarose or in medium containing less than 7% lamb serum also suggests that these cells have not been transformed by a virus.

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ERRATUM

Methionine Dependence in Cancer Cells — A Review

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Vol. 18, No. 5, page 424. The author has mistakenly referred to rat liver epithelial cells as fibroblasts in his review.