

初代培養: 1971年・ラット腹水肝癌AH-601より培養開始。

培養法: 静置培養、CS20%+LD培地。

樹立当初の特徴: 染色体核型は低三倍体。腹水系より数本少ない。(1) (2) (3)

AH-601-P3

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# Tissue Culture of Rat Ascites Hepatoma AH-601 Cells\*

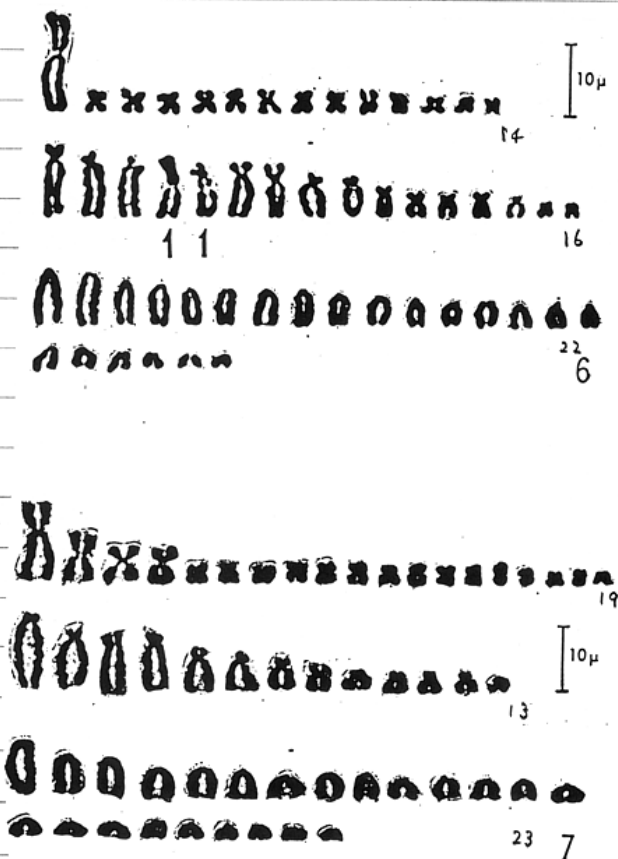
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**Summary:** The tumor cells of a transplantable rat ascites hepatoma AH-601 induced by feeding with aminozotoluene were grown in tissue culture. After 5 months and a half of cultivation continuous proliferation of cells was abruptly initiated and a cell strain has been established from them. The strain cells were proved to have preserved tumorigenicity and backtransplantability to animals. Some shift in modal number of chromosomes was detected in the strain cells, and the presence of a marker chromosome, a large metacentric, was noticed in most of the cells. Little difference was observed in morphology between the cells before and after the establishment as a cell strain.

(1) (2) (3)



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Distribution of chromosome numbers in rat ascites hepatoma AH-601 cells, in the tissue culture strain derived from them, and in the recultured strain. The specimen of the recultured strain was prepared as follows: The strain cells were backtransplanted into rats after 222 days of cultivation, transferred again to tissue culture 15 days after the transplantation, and cultivated for 55 days.

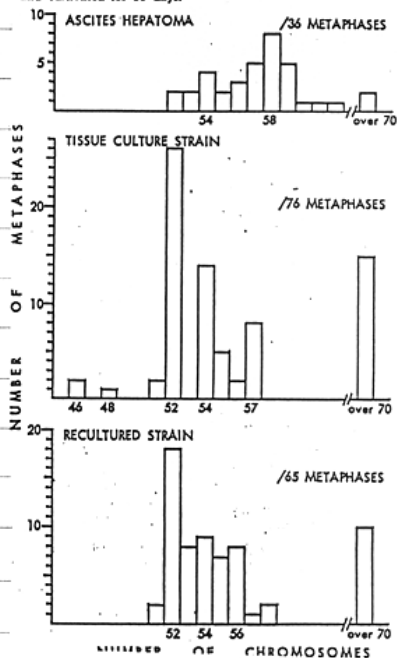
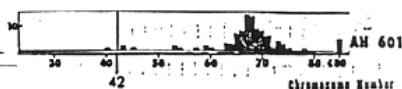


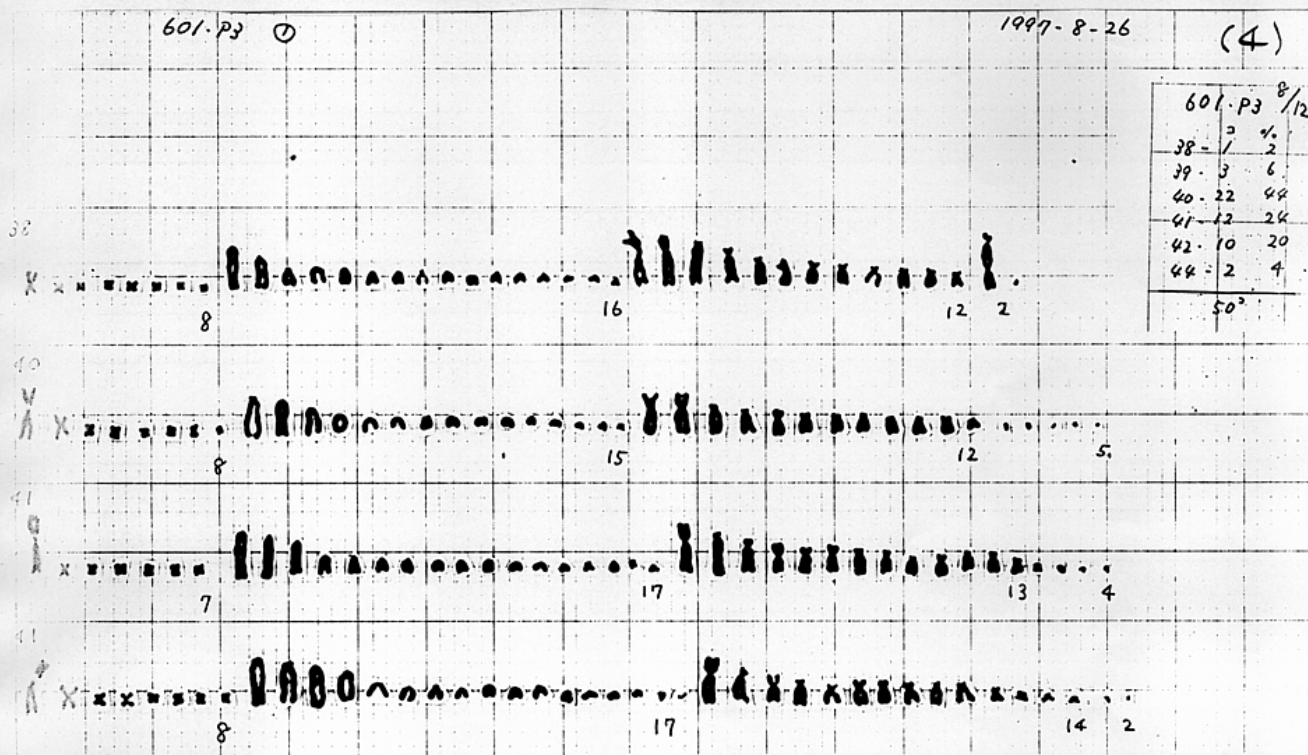
TABLE 5.—Characteristics of 16 strains of ascites hepatomas

| AH 00P Strains | AH Takes (%) | Survival (days) | Ascites (type) | Invasion  | Metastasis | Nitrofin sensitivity MED in vivo (mg/kg) |
|----------------|--------------|-----------------|----------------|-----------|------------|------------------------------------------|
| AH 601         | 87           | 15              | Island, middle | Slight    | Occasional | 1.0                                      |
| AH 7974        | 97           | 12              | Island, small  | Intensive | Frequent   | 50.0                                     |



P3系へ：1972年血清および蛋白を含まない合成培地に切り替えた。其の後、1991年からはDM-201培地、血清無添加、閉鎖培養（炭酸ガスフランクは使わない）に問題なく順応して、以後現在（2001年）まで継代を続けている。倍加時間はほぼ50時間。

染色体：1997年の検索では40本に最頻値を示した。（4）



#### 〈動物継代AH-601〉

ラット腹水肝癌AH-601は、吉田グループの0-aminoazotoluene発癌実験での1系として樹立。ナイトロミン、X線感受性。

#### 〈栄養要求〉

血清は馬血清より仔牛血清が良。（5）

AH-601 (JTC-27)

(5)

1952年 0-aminoazotoluene に23 ラット腹水肝癌系の一つとして樹立された

肝癌細胞の移植源

初期生存日数は 6~133日 移植率 85.7%

ナイトロミン X線感受性

1971年 初代培養開始（培地は20% CS + LD）（トリファン使用せず、ラバ-347-1）

1972年 株を継代 → JTC-27

血清はHCSよりCSが良

1972年 血清白（P3）系開始

#### 〈テロメアとテロメラゼ〉

テロメラゼは+、テロメア長は5.1キロベース

AH-601  
.P3

