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F. 健康危険情報

なし

G. 研究発表

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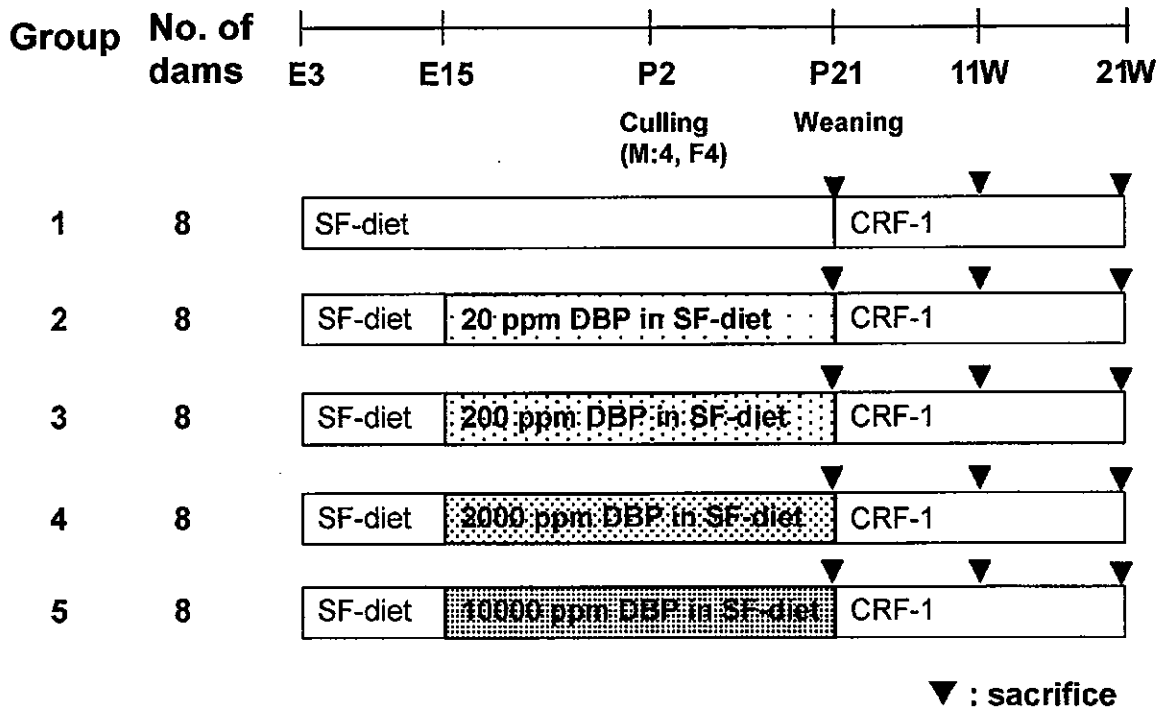
H. 知的所有権の取得状況

1. 特許
なし

2. 実用新案登録

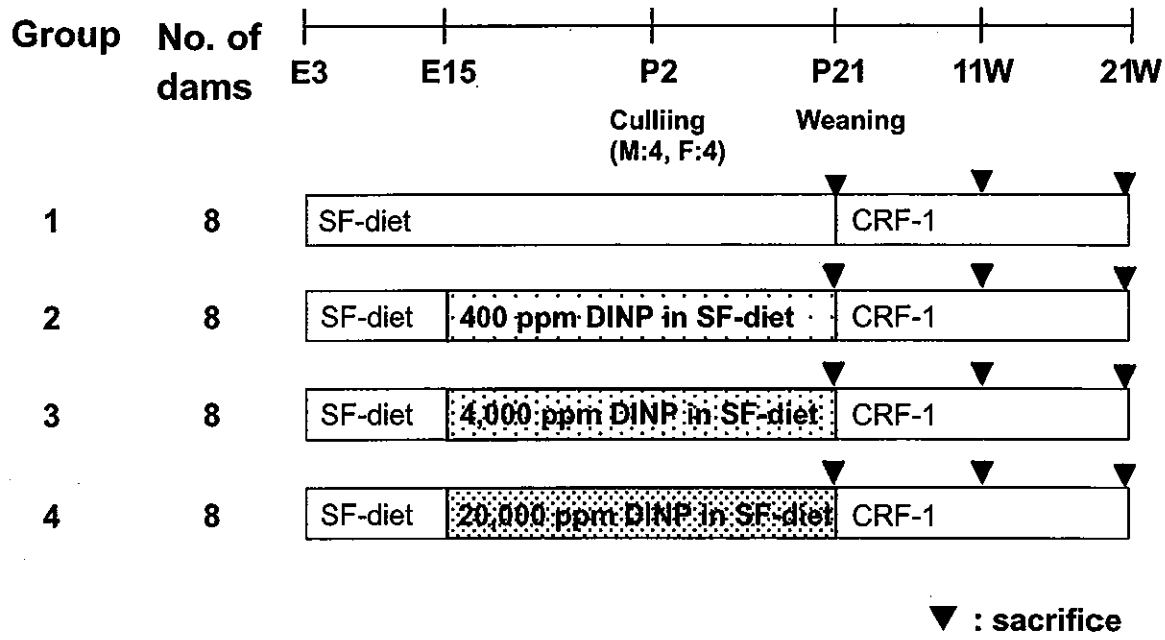
なし

3. その他
なし



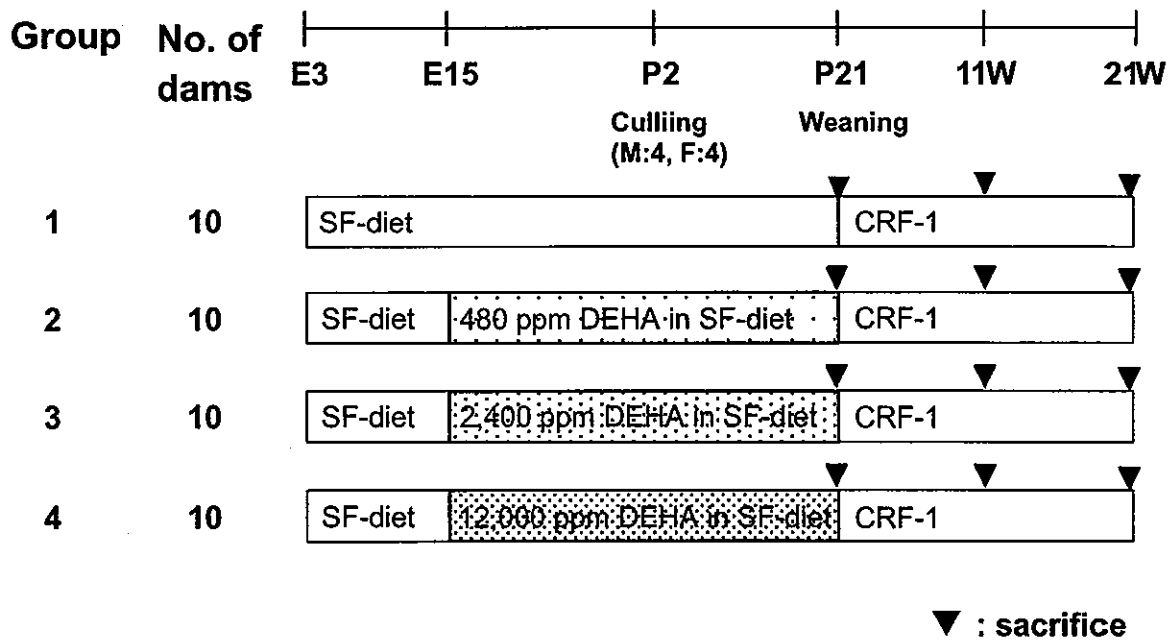
ANIMAL SPECIES: RAT STRAIN: Crj:CD(SD)IGS

Fig. 1-1
Experimental design of DBP Study



ANIMAL SPECIES: RAT STRAIN: Crj:CD(SD)IGS

Fig. 1-2
Experimental design of DINP Study



ANIMAL SPECIES: RAT STRAIN: Crj:CD(SD)IGS

Fig. 1-3
Experimental design of DEHA Study

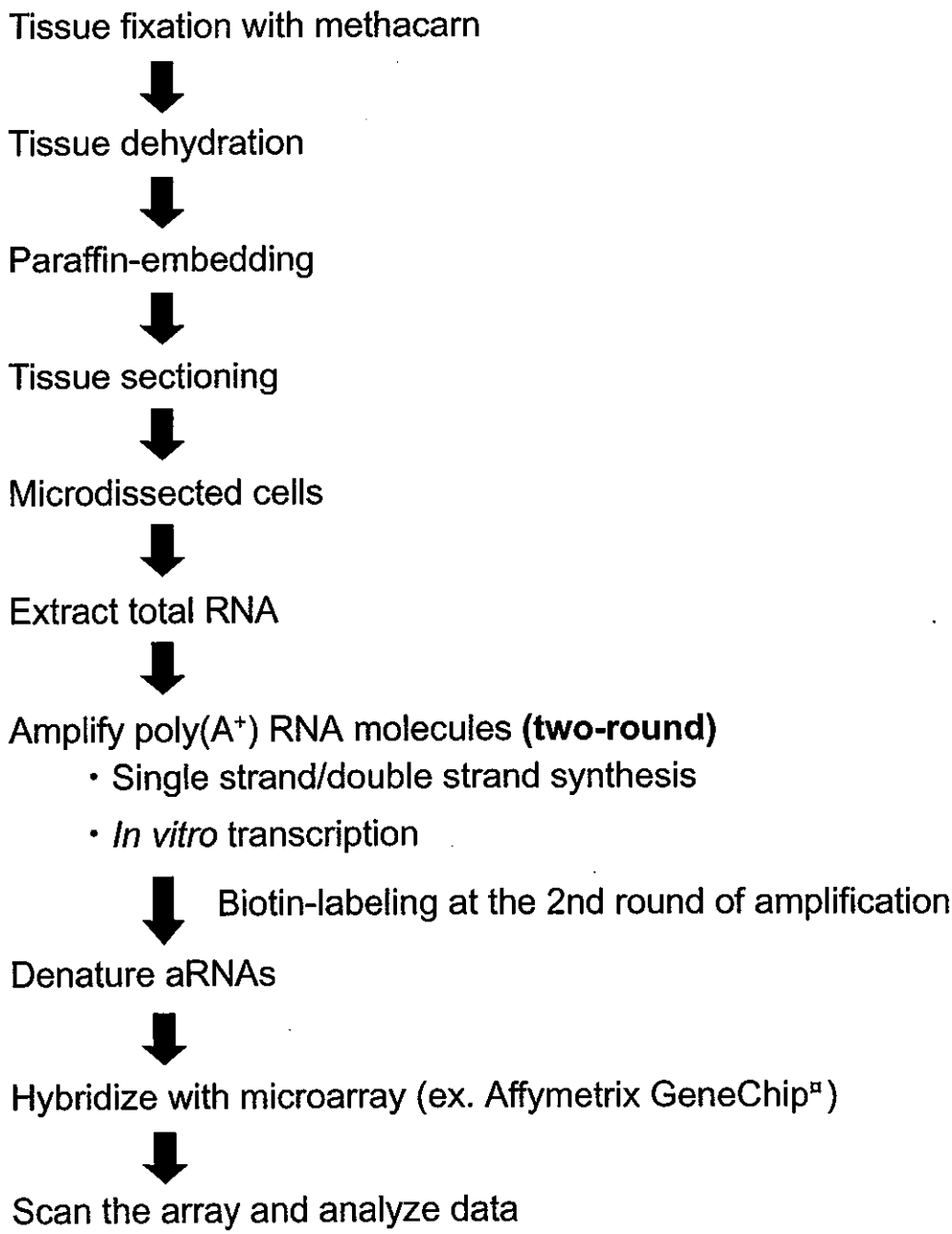


Fig. 1-4
Scheme for microarray analysis utilizing methacarn-fixed PETs

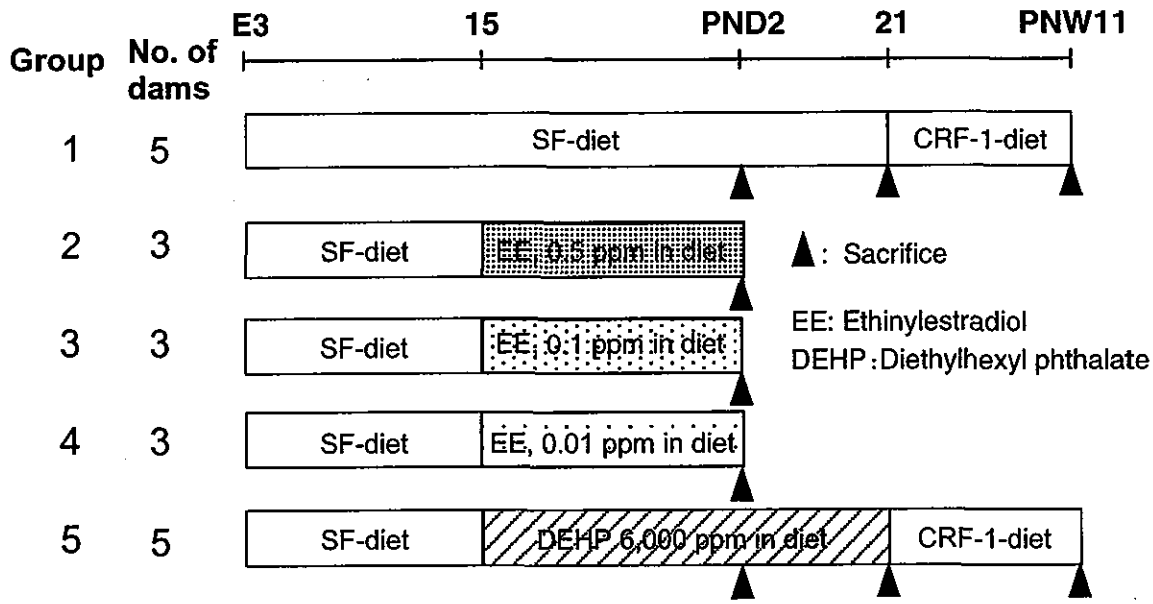


Fig. 1-5
Animal studies for global gene expression profiling for disruption of the brain sexual differentiation.

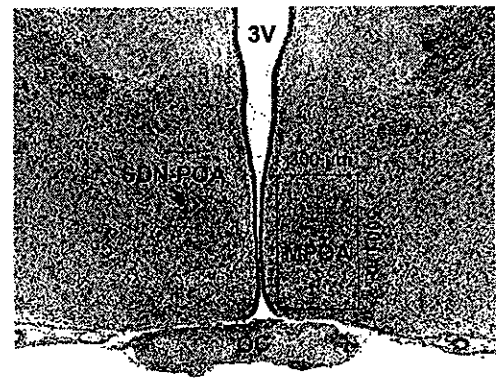


Fig. 1-6

Schematic view of male hypothalamic MPOA at PND 2. The enclosed area was microdissected from sections of methacarn-fixed paraffin-embedded brain slices for gene expression analysis. Note the intensely stained SDN region. Abbreviations: OC: optic chiasm; 3V: 3rd ventricle; MPOA: medial preoptic area; SDN-POA: sexually dimorphic nucleus of preoptic area.

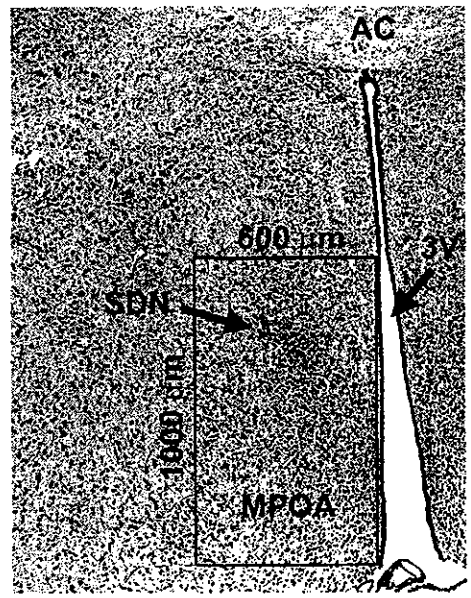


Fig. 1-7

Schematic view of male hypothalamic MPOA at PND 10. The enclosed area was microdissected from sections of methacarn-fixed paraffin-embedded *brain* slices for gene expression analysis. Note the intensely stained SDN region. Abbreviations: AC: anterior commissure; 3V: 3rd ventricle; MPOA: medial preoptic area; SDN: sexually dimorphic nucleus.

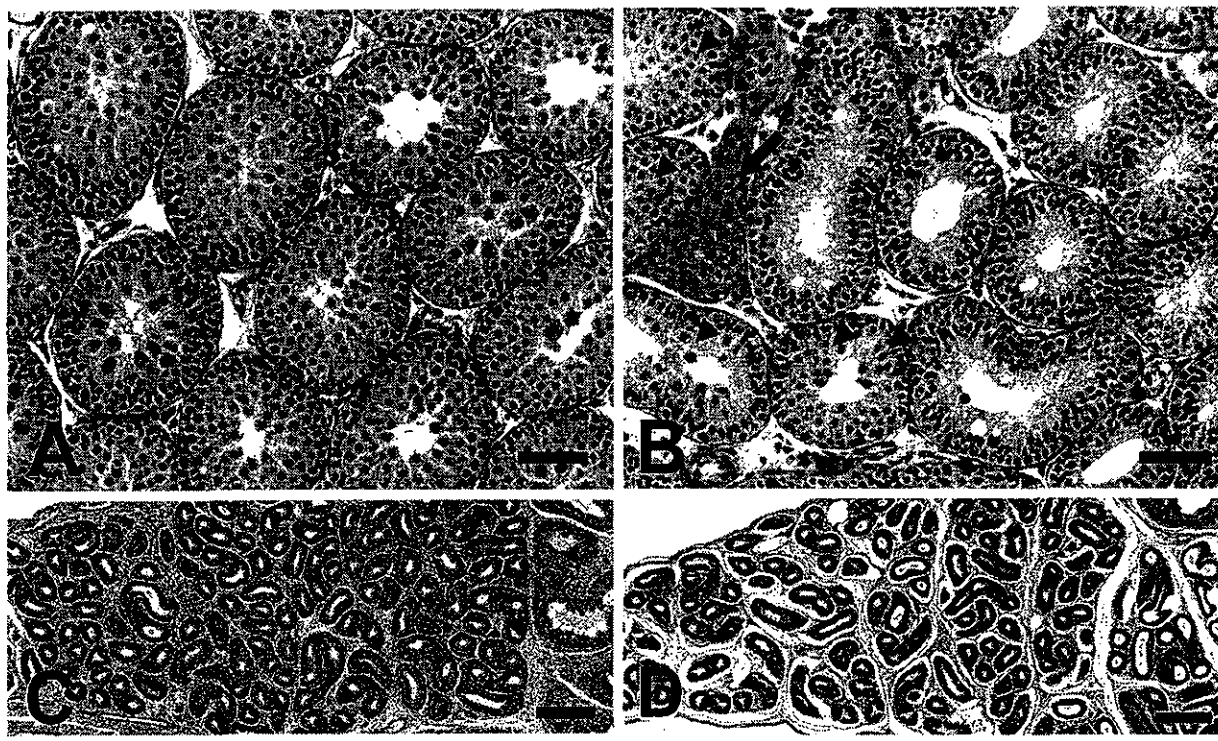


Fig. 1-8

Histopathological changes of the testis and epididymis in offspring at PND 21 following exposure to DBP during the late gestation and lactation periods (A-D). (A). Testis of a control male. (B). Reduction of spermatocyte development as manifested by decreased numbers in the seminiferous tubules in a male exposed to 10,000 ppm DBP. Note tubules lacking generation of spermatocytes and a focus of Leydig cell aggregation (arrow). Arrowheads indicate normally developing spermatocytes in some tubules. (C). Longitudinal section of the epididymal tail of a control male. (D). Decreased ductular cross sections of the epididymal ducts indicating reduced coiling in the corresponding portion to panel (C) in a male exposed to 10,000 ppm DBP. Bar = 50 μm (A and B); 200 μm (C and D).

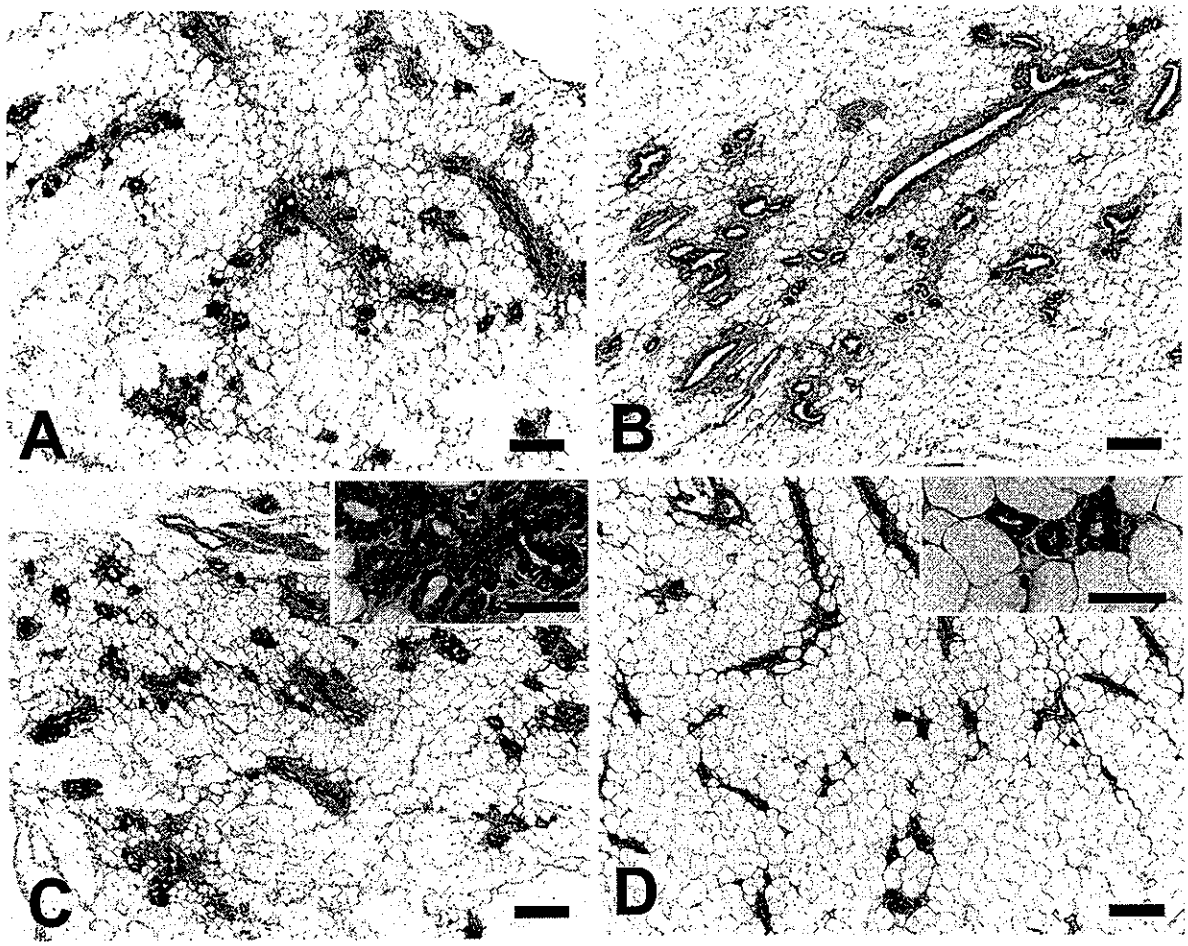


Fig. 1-9

Histopathological changes of the mammary gland in offspring at PND 21 following exposure to DBP during the late gestation and lactation periods (A-D). (A). Mammary gland of a control male. (B). Dilatation of alveolar buds and ducts in a male exposed to DBP at 20 ppm. (C). Mammary gland of a control female. Inset shows normal branching of alveolar buds from a terminal ductule. (D). Hypoplasia of alveolar buds of the mammary gland in a female exposed to DBP at 20 ppm. Inset illustrates poor branching of alveolar buds. Bar = 50 μm (insets in C and D); 200 μm (A-D).

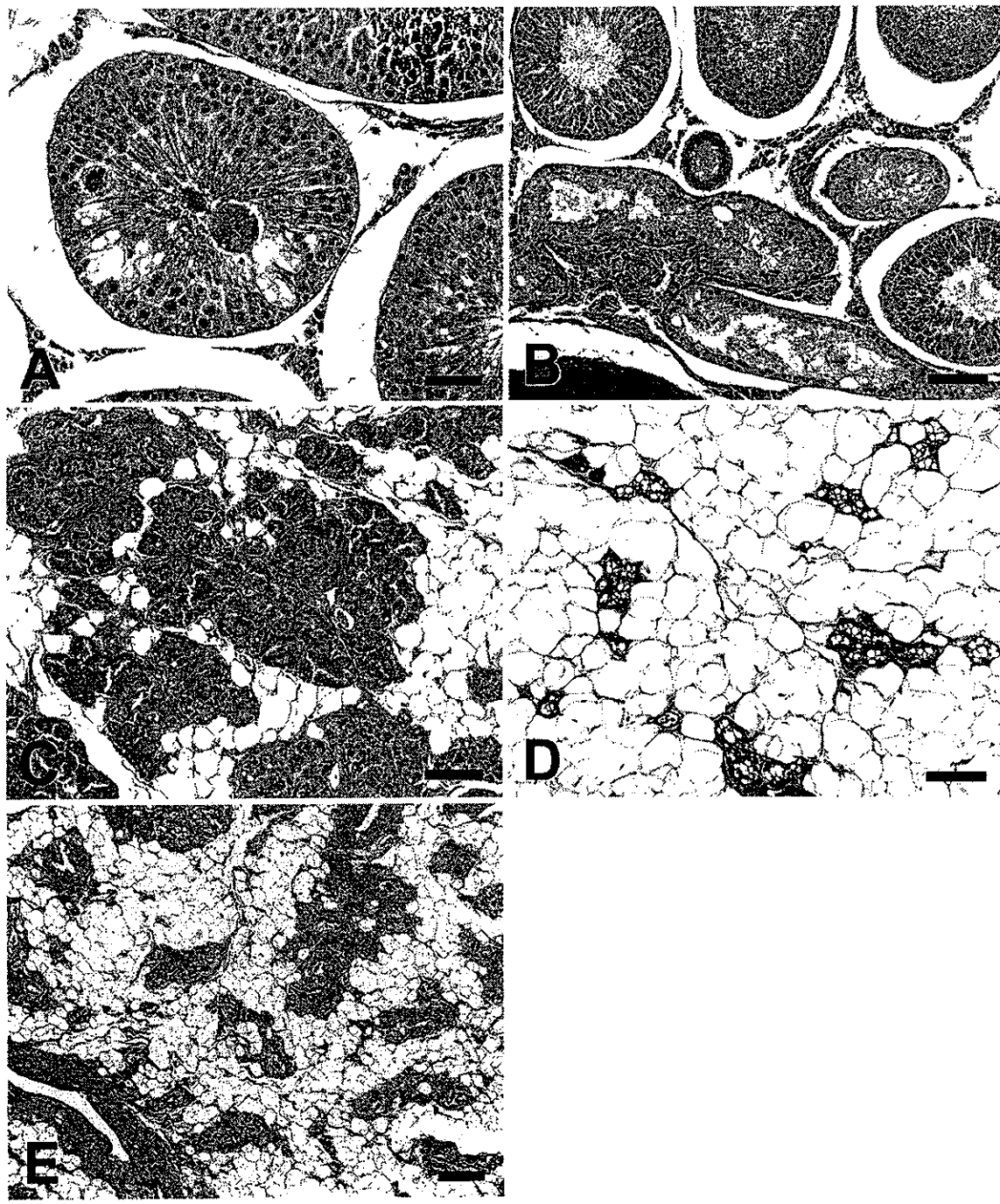


Fig. 1-10

Histopathological changes in offspring at the adult stage following exposure to DBP during the late gestation and lactation periods (A-E). (A). Focal loss of germ cells associated with vacuolar degeneration of Sertoli cells in a case exposed to 10,000 ppm DBP at PNW 11. Note appearance of giant cells within the tubule. (B). Entire loss of germ cells within the tubules in a case exposed to 10,000 ppm DBP at PNW 11. Affected tubular sections are composed solely of Sertoli cells, the feature being so-called 'Sertoli-cell only appearance'. Note Leydig cell hyperplasia around the tubular lesions. (C). Mammary gland of a control male at PNW 11. (D). Vacuolar degeneration of alveolar cells in the mammary gland of a male exposed to 10,000 ppm DBP. Alveolar atrophy is also evident in this case. (E). Alveolar atrophy associated with fibrosis of surrounding connective tissue in the mammary gland of a male exposed to 20 ppm DBP. Bar = 50 μm (A); 100 μm (B-D); 200 μm (E).

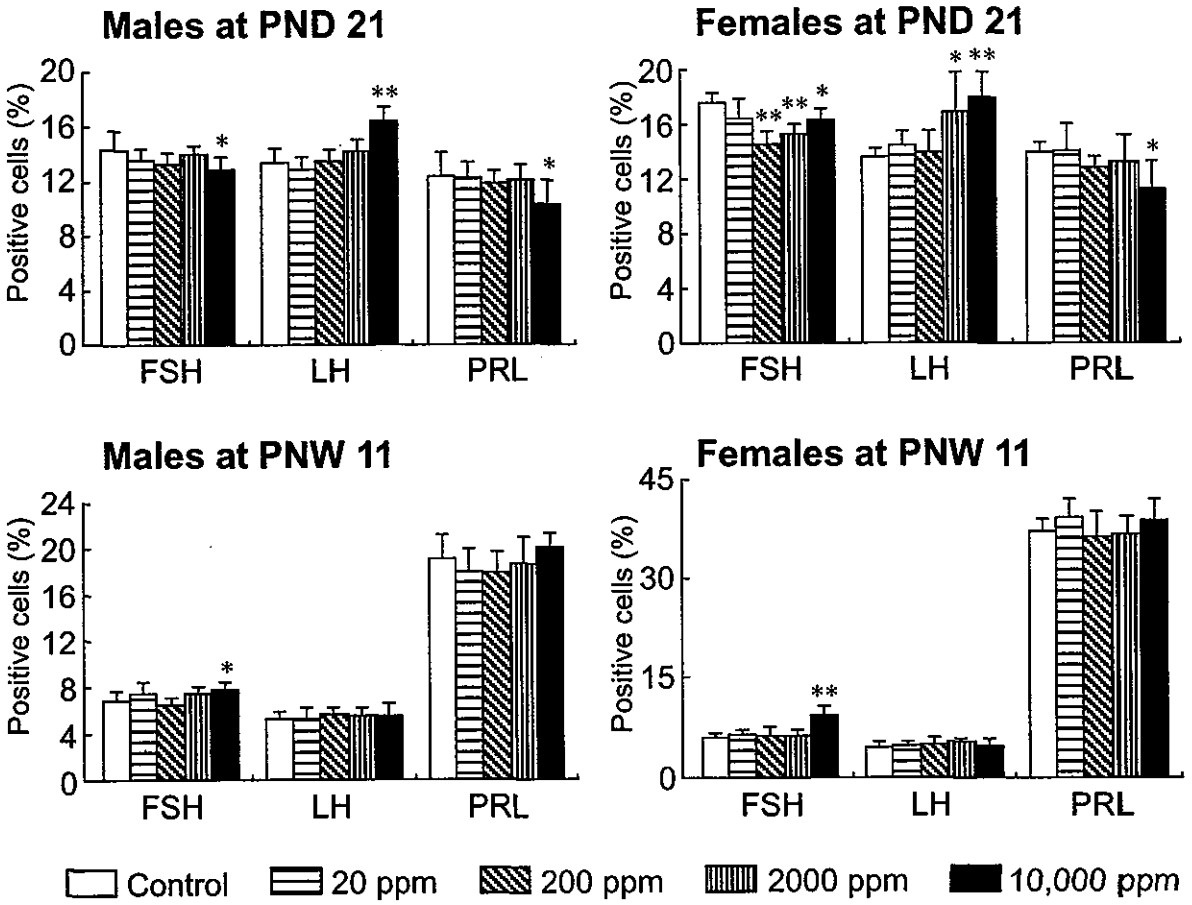


Fig. 1-11
Percentages of FSH, LH, and PRL-positive cells in the anterior pituitary of offspring at PND 21 and PNW 11 following exposure to DBP during the late gestation and lactation. Asterisks indicate statistically significant differences between controls and DBP-exposed animals (*, $p < 0.05$, **, $p < 0.01$ by Dunnett's test or Dunnett-type rank-sum test).

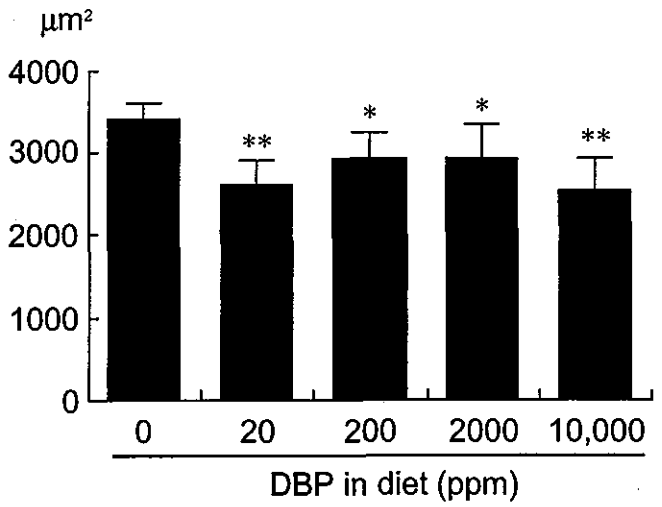


Fig. 1-12
Average size of mammary alveolar buds in male offspring at PNW 11 following exposure to DBP during the late gestation and lactation periods. Asterisk sindicate statistically significant differences between controls and DBP-exposed animals (*, $p < 0.05$, **, $p < 0.01$ by Dunnett's test or Dunnett-type rank-sum test).