

Fig. 3. The percentage of ACTH-ir cells in the anterior pituitary gland of A group mice. Values are expressed as means \pm SEM. * $p < 0.05$ and ** $p < 0.01$ vs. 0 subgroup (control). The number of mice in each SG is 5.

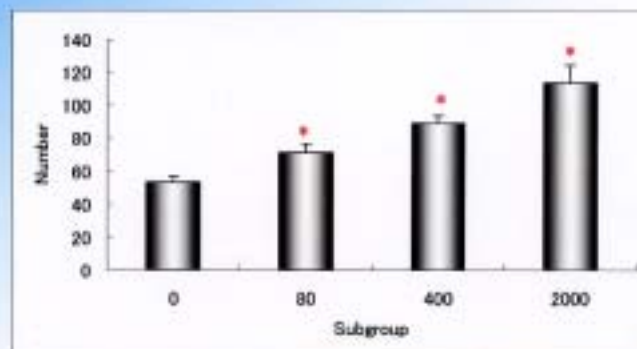


Fig. 4. The numbers of ACTH-ir cells in the anterior pituitary gland of A group mice. Values are expressed as means \pm SEM. * $p < 0.01$ vs. 0 subgroup (control). The number of mice in each SG is 5.

Fig. 5. Quantitative RT-PCR analysis of expression of ACTH gene in the pituitary of A and B group mice

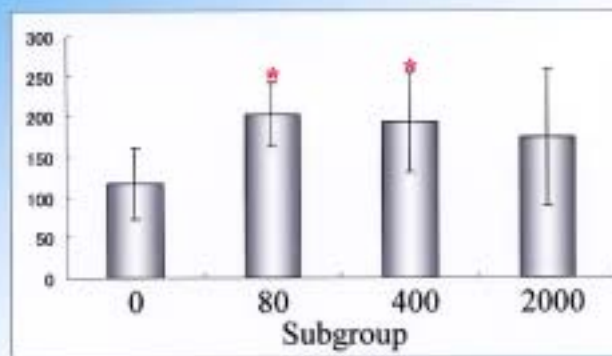


Fig. 6. Serum corticosterone concentration of A group mice. (0) 0 ppb formaldehyde; (80) 80 ppb formaldehyde;(400) 400 ppb formaldehyde; (2000) 2000 ppb formaldehyde. Values are mean \pm SD.

*P<0.05 vs. 0 subgroup (control).

The number of mice in each group is 5.

Subgroup	BW (g)	AW (mg)	AW/BW ($\times 10^{-4}$)	VPG ($\times 10^7$)
0	28.46 \pm 0.45	5.83 \pm 0.27	2.05 \pm 0.09	83.025 \pm 3.219
80	27.00 \pm 0.47*	6.17 \pm 0.35	2.29 \pm 0.38	76.803 \pm 1.459
400	28.78 \pm 0.25	5.68 \pm 0.18	1.98 \pm 0.23	85.682 \pm 3.911
2000	29.02 \pm 0.33	5.68 \pm 0.39	1.96 \pm 0.14	81.907 \pm 2.945

Table 2. Body weight (g), absolute (mg) and relative weight (adrenal weight/body weight) of adrenal gland, and volume of pituitary gland of B group mice. Data are expressed as mean \pm SEM. * $p < 0.05$ vs. control (0 subgroup). BW: body weight, AW: adrenal weight, VPG: volume of anterior pituitary gland

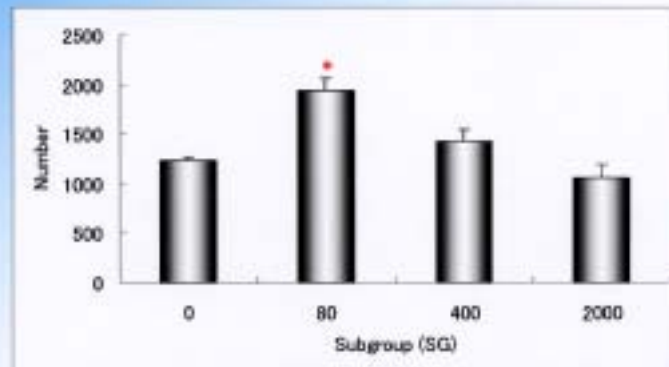


Fig. 7. The number of CRH-ir neurons in the PVN areas of hypothalamus of B group mice. Values are expressed as means \pm SEM. * $p < 0.01$ vs. 0 subgroup (control). The number of mice in each subgroup is 5.

Fig. 8.

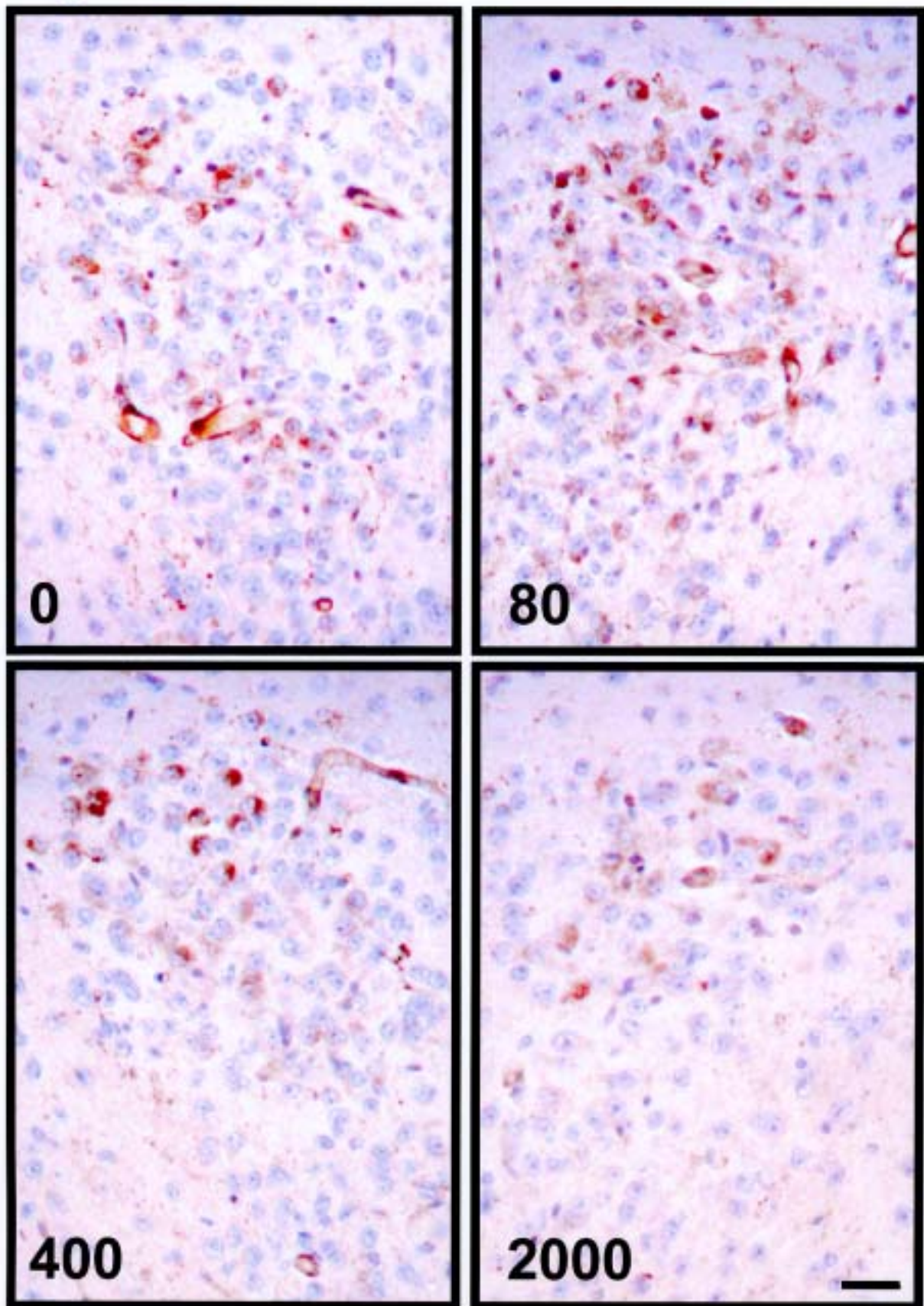


Fig. 8. The CRH-ir neurons in the PVN of B group mice. (0) 0 ppb FA; (80) 80 ppb FA; (400) 400 ppb FA; (2000) 2000 ppb FA. The CRH-ir neurons was significantly, higher in the 80 subgroup than other subgroups and no differences were found between CRH-ir neurons in the 400 subgroup or 2000 subgroup and the control subgroup. Bar = 50 μ m.

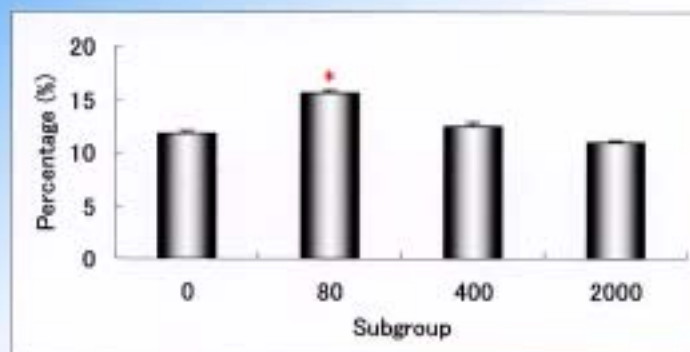


Fig. 9. The percentage of ACTH-ir cells in the anterior pituitary gland of B group mice. Values are expressed as means \pm SEM. * $p < 0.01$ vs. 0 subgroup (control). The number of mice in each SG is 5.

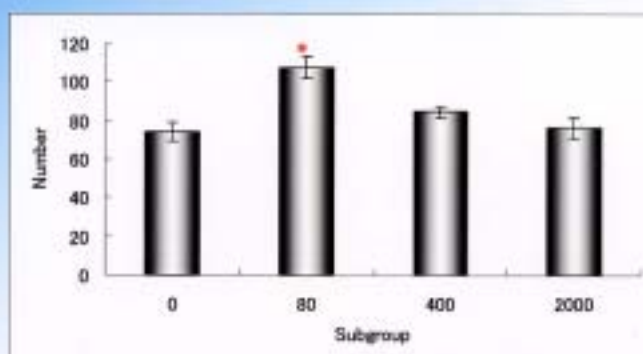


Fig. 10. The numbers of ACTH-ir cells in the anterior pituitary gland of B group mice. Values are expressed as means \pm SEM. * $p < 0.01$ vs. 0 subgroup (control). The number of mice in each SG is 5.

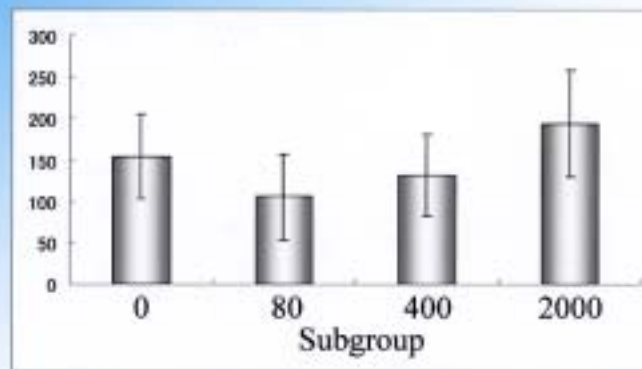


Fig. 11. Serum corticosterone concentration of B group mice. (0) 0 ppb formaldehyde; (80) 80 ppb formaldehyde; (400) 400 ppb formaldehyde; (2000) 2000 ppb formaldehyde. Values are mean \pm SD. The number of mice in each group is 5.

Subgroup	BW (g)	AW (mg)	AW/BW ($\times 10^{-4}$)	VPG ($\times 10^7$)
T-0	27.76 \pm 0.59	6.55 \pm 0.24	2.38 \pm 0.12	92.78 \pm 14.34
T-80	28.44 \pm 0.53	5.47 \pm 0.18*	1.93 \pm 0.07*	79.45 \pm 9.09
T-400	27.72 \pm 0.26	6.26 \pm 0.24	2.26 \pm 0.08	90.30 \pm 3.58
T-2000	27.06 \pm 0.45	5.72 \pm 0.23*	2.12 \pm 0.09	78.79 \pm 4.40

Table 3. Body weight (g), absolute (mg) and relative weight (adrenal weight/body weight) of adrenal gland, and volume of pituitary gland of C group mice. Data are expressed as mean \pm SEM. * $p < 0.05$ and [#] $p < 0.01$ vs. control (0). BW: body weight, AW: adrenal weight, VPG: volume of anterior pituitary gland

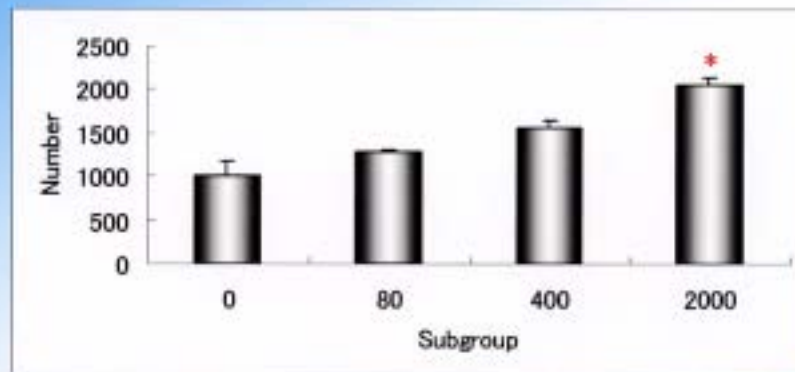


Fig. 12. The number of CRH-ir neurons in the PVN areas of hypothalamus of C group mice. Values are expressed as means \pm SEM. * $p < 0.05$ vs. 0 subgroup (control). The number of mice in each subgroup is 3.

Fig. 13.

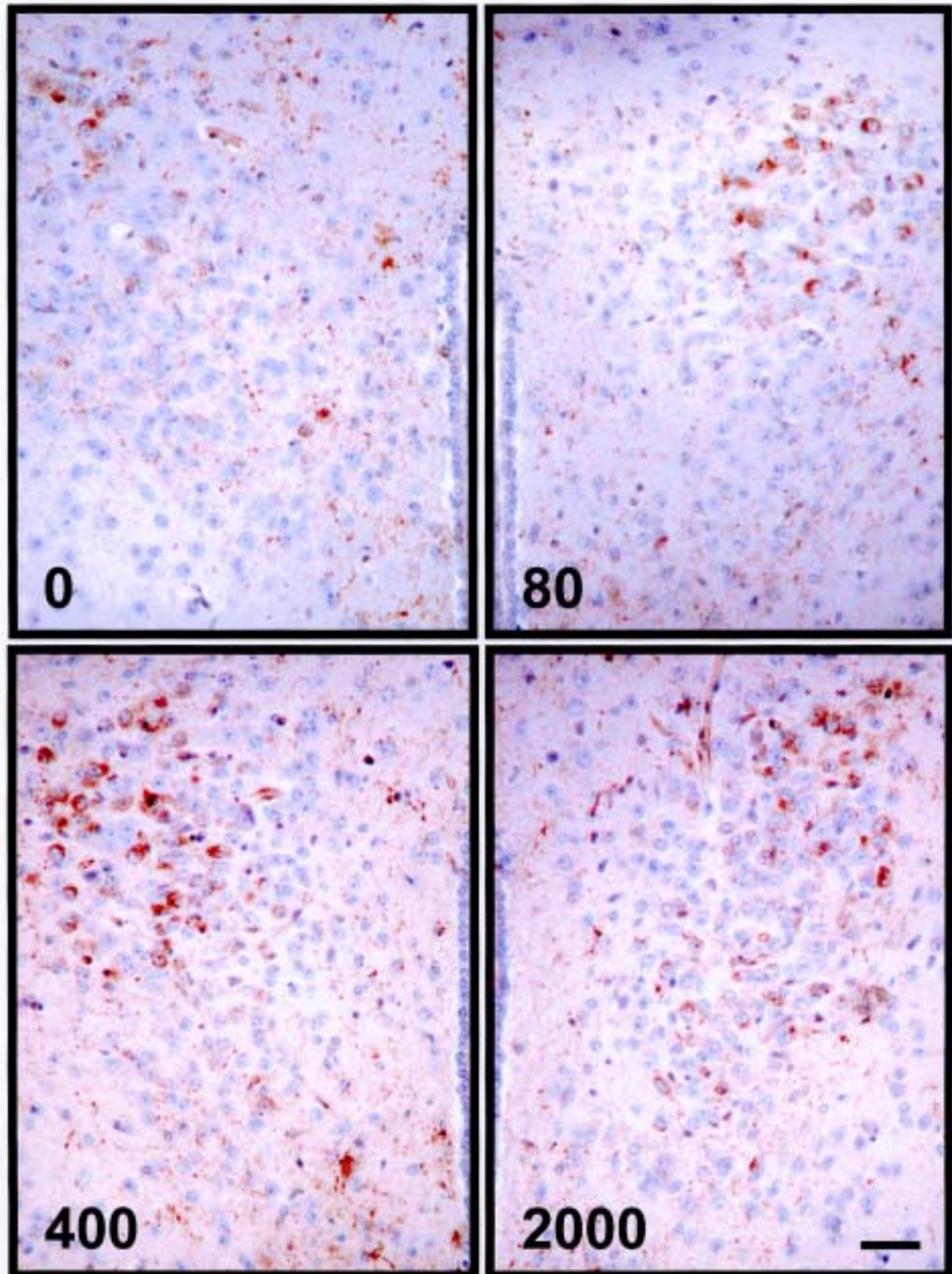


Fig. 13. The CRH-ir neurons in the PVN of C group mice. (0) 0 ppb formaldehyde; (80) 80 ppb formaldehyde; (400) 400 ppb formaldehyde; (2000) 2000 ppb formaldehyde. The CRH-ir neurons were up-regulated according to the quantity of formaldehyde inhaled. Bar = 50 μ m.

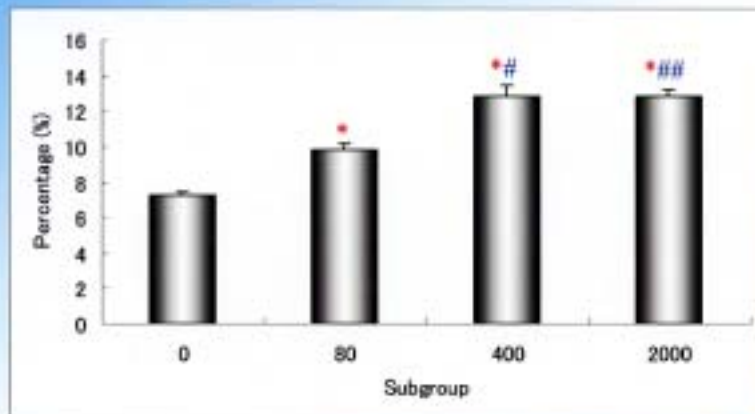


Fig. 14. The percentage of ACTH-ir cells in the anterior pituitary gland of C group mice. Values are expressed as means \pm SEM. * $p < 0.01$ vs. 0 subgroup (control), # $p < 0.05$ and ## $p < 0.01$ vs 80 subgroup. The number of mice in each SG is 3.

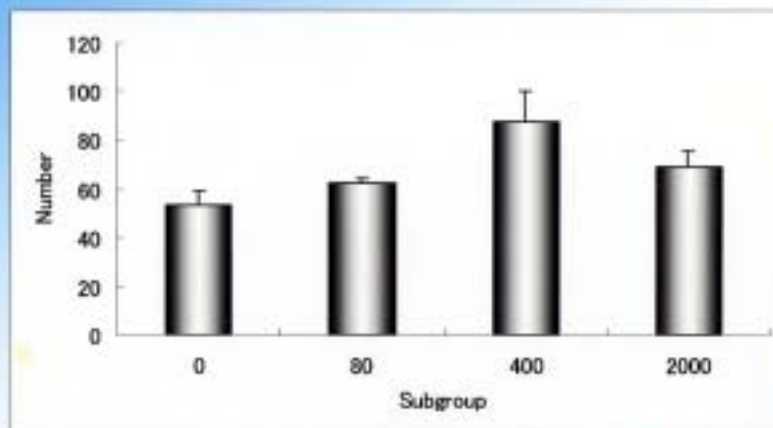


Fig. 15. The numbers of ACTH-ir cells in the anterior pituitary gland of C group mice. The number of mice in each SG is 3.

Fig. 16. Quantitative RT-PCR analysis of expression of ACTH gene in the pituitary of C group mice

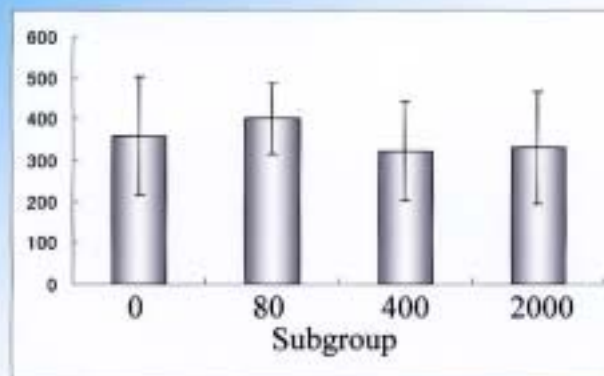
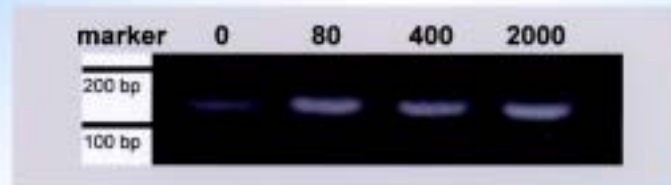


Fig. 17. Serum corticosterone concentration of C group mice. (0) 0 ppb formaldehyde; (80) 80 ppb formaldehyde; (400) 400 ppb formaldehyde; (2000) 2000 ppb formaldehyde. Values are mean \pm SD. The number of mice in each group is 10.