

Fig. 9. Expression of ACTH-mRNA in the pituitary gland of mice exposed to toluene prior to inhalation of formaldehyde over 3 months using RT-PCR (A) and the intensity relative to that of  $\beta$  -actin mRNA (B). The size of the amplification bands of ACTH was 117 bp. M, 100-bp ladder. Five pituitaries in each group were mixed and analyzed together.

Table 3.Body weight (g), absolute (mg) and relative weight (adrenal weight/body<br/>weight) of the adrenal gland, and volume of pituitary gland of NAG<br/>(OAV—) and AG (OVA+) mice.

| Groups    | Subgroups | BW (g)                 | AW (mg) | AW/BW (%)      | VPG (x10 <sup>6</sup> µm <sup>3</sup> ) |
|-----------|-----------|------------------------|---------|----------------|-----------------------------------------|
| OVA- mice | Control   | 30.2±0.5               | 5.9±0.4 | 19.2±1.7       | $701.5 \pm 5.4$                         |
|           | Toluene   | 32.0±0.4 <sup>*#</sup> | 6.4±0.4 | $19.8 \pm 1.0$ | $736.2 \pm 2.2$                         |
| OVA+ mice | Control   | 30.4±0.5               | 5.3±0.3 | 17.8±1.3       | $703.1 \pm 1.7$                         |
|           | Toluene   | 30.3±0.4¶              | 6.3±0.4 | 20.1±1.2       | $709.5 \pm 1.7$                         |

Data are expressed as mean  $\pm$  SEM.

\*p<0.05 vs. 0 (control) subgroup of NAG mice,

<sup>#</sup>p<0.05 vs. 0 (control) subgroup of AG mice,

<sup>¶</sup>p<0.05 vs. the corresponding subgroup of NAG mice,

BW: body weight,

AW: adrenal weight,

VPG: volume of anterior pituitary gland,

The number of mice in each subgroup is 10 except for VPG (n=5).