

FIG. 13. Representative examples of the checkerboard pattern of expression seen immunohistochemically along the epididymis. a. High power light micrograph of tubules of the distal area of the initial segment immunostained with anti-immobilin. Although many principal cells are reactive, they show a variable staining pattern. Several principal cells are intensely stained throughout their cytoplasm (arrows), while others are moderately or weakly stained (arrowheads); a few are unreactive (P). The luminal content (Lu) is well stained. IT, intertubular space. x350. [87]. b. High power light micrographs of the proximal initial segment of the epididymis. Epithelial principal cells (P), nuclei of principal cells (n), basal cells (B), and lumen of the duct (Lu) are shown. Intense staining in the infranuclear region of the principal cells is designated by the arrowheads. Immunostaining reaction is confined to an oval region present above the nuclei of the principal cells (large arrows). Magnification x400 [517]. c. Higher power micrograph of portions of adjacent tubules of the caput epididymis immunostained with anti-SGP-2. Note intense immunoperoxidase staining reaction product over some epithelial principal cells (P). Other principal cells are moderately (arrowheads) or weakly (curved arrows) immunoreactive. A few principal cells are virtually unreactive (arrow). Note that the reaction product extends throughout the entire cell cytoplasm, i.e. basal, supranuclear and apical regions, leaving only the nucleus (n) unstained. The microvillar (Mv) border of the principal cells and sperm in the lumen (Lu) of the tubules are reactive. IT, intertubular space x600 [952]. Micrographs are modified from [87], [517], and [952].