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JOURNAL ARTICLE

Culture of ciliated and nonciliated cells from rat ductuli efferentes

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The isolation and culture of ciliated and nonciliated cells from rat ductuli efferentes is described. Fragments of epithelium obtained after two collagenase digestions attached to plastic and to extracellular matrix and could be maintained in culture for at least 2 weeks. Ciliary beating in cells grown on epididymal extracellular matrix-coated plastic could be observed for up to 7 days in culture. Although cells maintained on this substrate retained organelles characteristic of cells in vivo, they assumed a flattened, squamous appearance. In contrast, cells growing on the surface of permeable supports impregnated with extracellular matrix were polarized and exhibited a cuboidal/columnar appearance. Androgen binding protein conjugated to colloidal gold was taken up by these cells via coated pits and was found sequentially in uncoated endosomes, multivesicular bodies and lysosomes.