



Cover: An embryo of euryhaline tilapia *Oreochromis mossambicus* can acclimatize to both freshwater and seawater by means of mitochondria-rich cells (MRCs) in the epithelium covering the yolk. Although MRCs are considered to be involved in both ion uptake in freshwater and ion secretion in seawater, the ion-uptake mechanism has been controversial. Hiroi, Yasumasu, McCormick, Hwang and Kaneko (pp. 2584–2599) classify MRCs clearly into four types (Types I–IV), by simultaneous immunofluorescence staining for five ion-transport proteins, and propose a novel ion-uptake model incorporating an apical Na–Cl cotransporter (cyan staining in a Type-II MRC).

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