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U-73122 对猪子宫平滑肌细胞和胰腺 β 细胞株 RINm5F 的电压依赖性钙离子通道的作用

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关键词 Bay-K-8644; 钙; 钙通道; Fura-2; 胰岛; 子宫平滑肌; 膜片钳技术; 磷脂酶 C; U-73122; U-73343

R972 S859.792

目的: 研究 U-73122 对细胞内钙离子浓度和电压依赖性钙通道的作用。方法: 用 Fura-2 荧光测定胞浆钙浓度和用穿孔膜片钳记录全细胞钙电流。结果: U-73122 呈剂量相关明显地降低 RINm5F 细胞与子宫平滑肌细胞的去极化诱导的钙电流, 并抑制 KCl 诱导的与 Bay-K-8644 诱导的胞浆钙浓度的增加。U-73122 的这种作用对子宫平滑肌细胞要比 RINm5F 细胞强, 而一种非磷脂酶 C 抑制剂 U-73122 类似物 U-73343 也能降低钙电流 50%。结论: U-73122 抑制 RINm5F 细胞与猪子宫平滑肌细胞的电压依赖性钙通道和胞浆钙浓度。

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