



*Murine airway epithelial cells synthesize hyaluronan on their apical surface when treated with multiple toxins that induce endoplasmic reticulum stress.* Fig. 4 demonstrated that epithelial cells produce apical hyaluronan in response to a toxin that induces ER-stress by preventing N-glycosylation (i.e. tunicamycin), but not a viral mimic (i.e. poly(I:C)). The present figure shows that the epithelial cells respond to two additional toxins that induce ER-stress. Both the calcium ionophore A23187 (panel B, 5  $\mu\text{g/ml}$ ) and the ER calcium ATPase inhibitor thapsigargin (panel C, 1  $\mu\text{g/ml}$ ), both of which are well known inducers of ER-stress, induced the accumulation of hyaluronan (green) on the apical surface of the epithelial cells (black). These images were taken on live epithelial cells in the same manner as described in fig. 4. Mag. 20x. Mag. bar is 100  $\mu\text{m}$  (upper right).