Supplementary information

1. Supplementary figures:

Figure S1. Localization of p115 and COPII coats. NRK cells expressing GFP-Rab1A were labeled with antibodies against mSec13 (COPII; A) and p115 (B), and examined by CM. (A) Note that the mSec13-positive ERES are largely absent from the pericentrosomal region. (B) The Rab1 effector p115 extensively colocalizes with its partner, but is absent from part of the Rab1A-positive tubules extending from the pcIC. Bars: 10 µm.

Figure S2. The pcIC functions as a way station in transport of ER-derived Man II. Man II was localized in GFP-Rab1A-expressing NRK cells at different times after BFA-washout. Note that the protein enters the pcIC at 20 min, before the reassembly of the Golgi apparatus has taken place. For comparison, the control cells, BFA-treated cells, and cells fixed at 60 min after drug removal (in which Golgi reassembly is complete) are shown. Bar: 10 µm.

2. Supplementary movies:

All movies show the stable NRK cells expressing GFP-Rab1A.

Movie 1. Dynamics of the IC in subconfluent cells as studied by time-lapse CM. The cells were recorded over a 15 hr period. Note the movements of the pcIC coupled to cell motility and division, its existence as a separate structure at the cell centre for long periods of time, as well as subsequent merge with the Golgi ribbon.

Movie 2. Spinning disk CM recording was initiated immediately after BFA addition and Z-stacks (10) were collected at 20 sec intervals during the 40 min drug-treatment. Note the breakdown of the Rab1A-containing, *cis*-Golgi adjacent membranes, simultaneous increase in the fluorescence signal of nearby IC elements, and the persistance of the pcIC. Movie corresponds to Fig. 2F.

Movie 3. Reversible separation of the pcIC from the Golgi ribbon a shown by time-lapse CM. Note the expansion and compaction of the pcIC that coincide with its segregation and merge with the Golgi, respectively. Movie corresponds to Fig. 3A.

Movie 4. Spinning disk CM showing communication between the pcIC and two separate Golgi stacks located at opposite sides of the nucleus. Note the dynamics of the pcIC network, including the formation of tubular pcIC-Golgi connections, which create transient tracks for the movement of bolus structures (varicosities). Movie corresponds to Fig. 4F (upper panels).

Movie 5. In a motile cell the detachment of the pcIC from the Golgi ribbon is followed by the transfer of the latter, evidently via the pcIC, from one side of the nucleus to the other. This movie, taken by time-lapse CM, corresponds to Fig. 3B. Note that the end of Movie 3 also contains a similar event.

Movie 6 Directed movement of pleiomorphic IC elements from peripheral sites towards a focal point in the Golgi ribbon, most likely corresponding to the masked pcIC. See Fig. 4A.

Movie 7. The isolated pcIC is a predominant target for mobile IC elements originating at peripheral sites. Note that some motile IC elements are also directed towards the Golgi ribbon. See Fig. 4B.

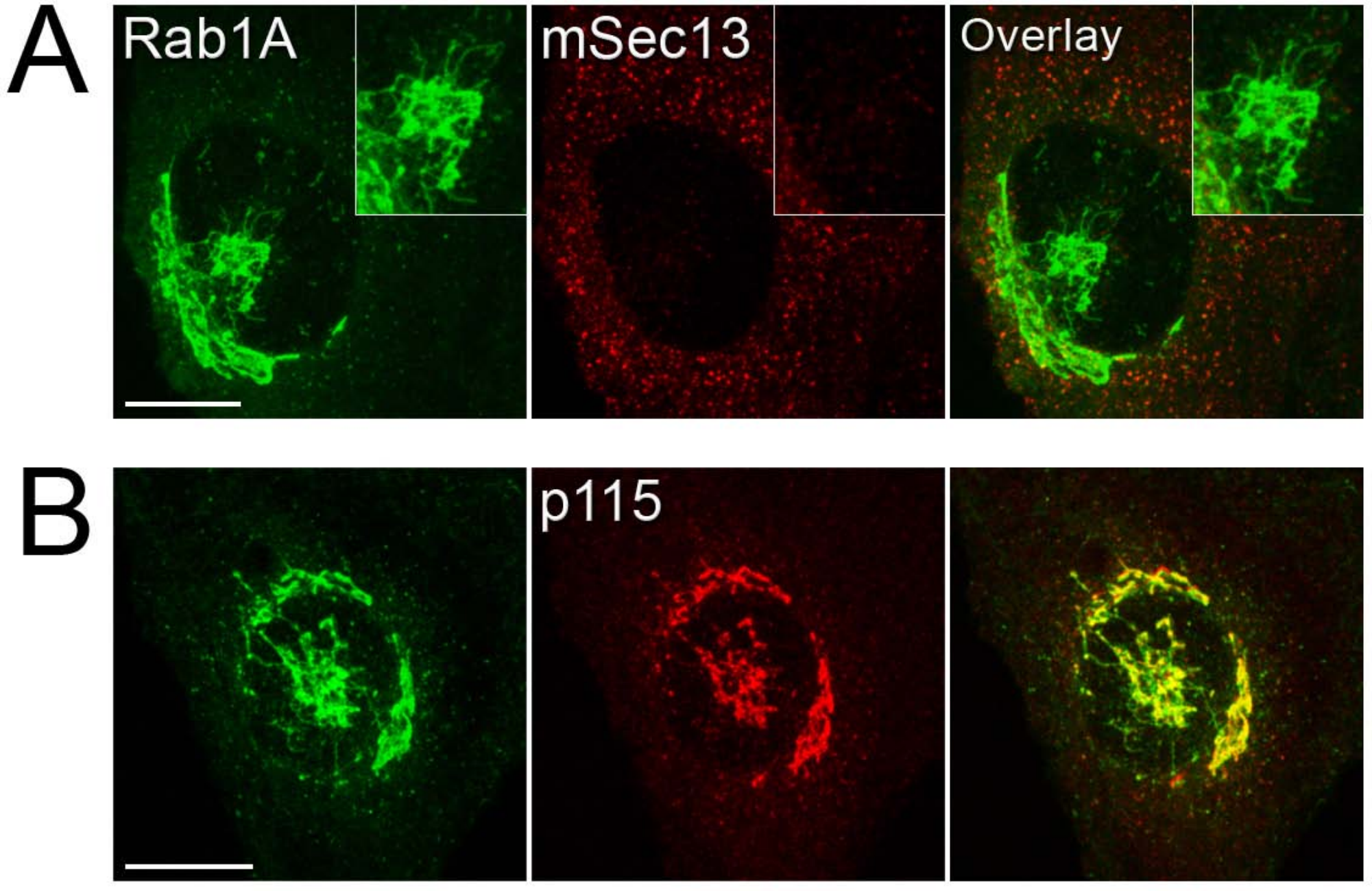
Movie 8. A long tubule extending from the pcIC establishes a semi-permanent, long-distance connection with the Golgi ribbon. Movie corresponds to Fig. 4E.

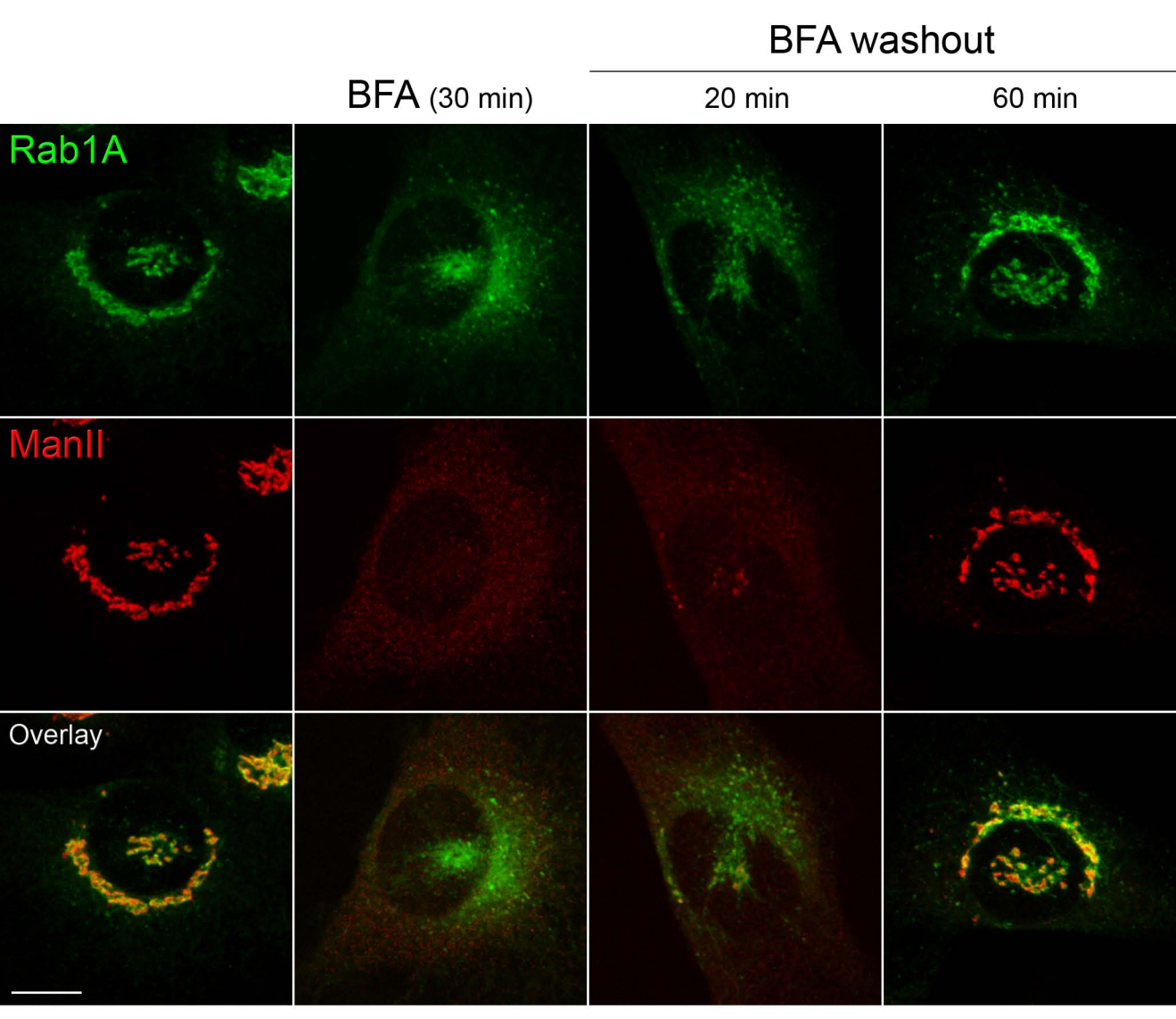
Movie 9. Active communication between pcIC and a nearby Golgi ribbon. Movie corresponds to the inset in Fig. 4E.

Movie 10. Dynamics of the IC in cells treated for 40 min with BFA. Note the protrusion of tubules from peripheral IC elements towards the pcIC, which frequently results in complete consumption of their GFP signal, as well as the oscillation of the fluorescent signal at the peripheral sites. Movie corresponds to Fig. 7A and inset. See also Fig. 7C.

Movie 11. A tubular network extends from the pcIC towards the cell periphery. Note the long tubules moving in parallel with the plasma membrane. This movie – recorded 45 min after BFA addition – corresponds to Figs. 7D and E.

Movie 12. Dynamics of the IC network recorded at 35 min after BFA addition.


A
Rab1A
mSec13
Overlay
B
p115


BFA washout
BFA (30 min)
20 min
60 min
Rab1A
ManII
Overlay