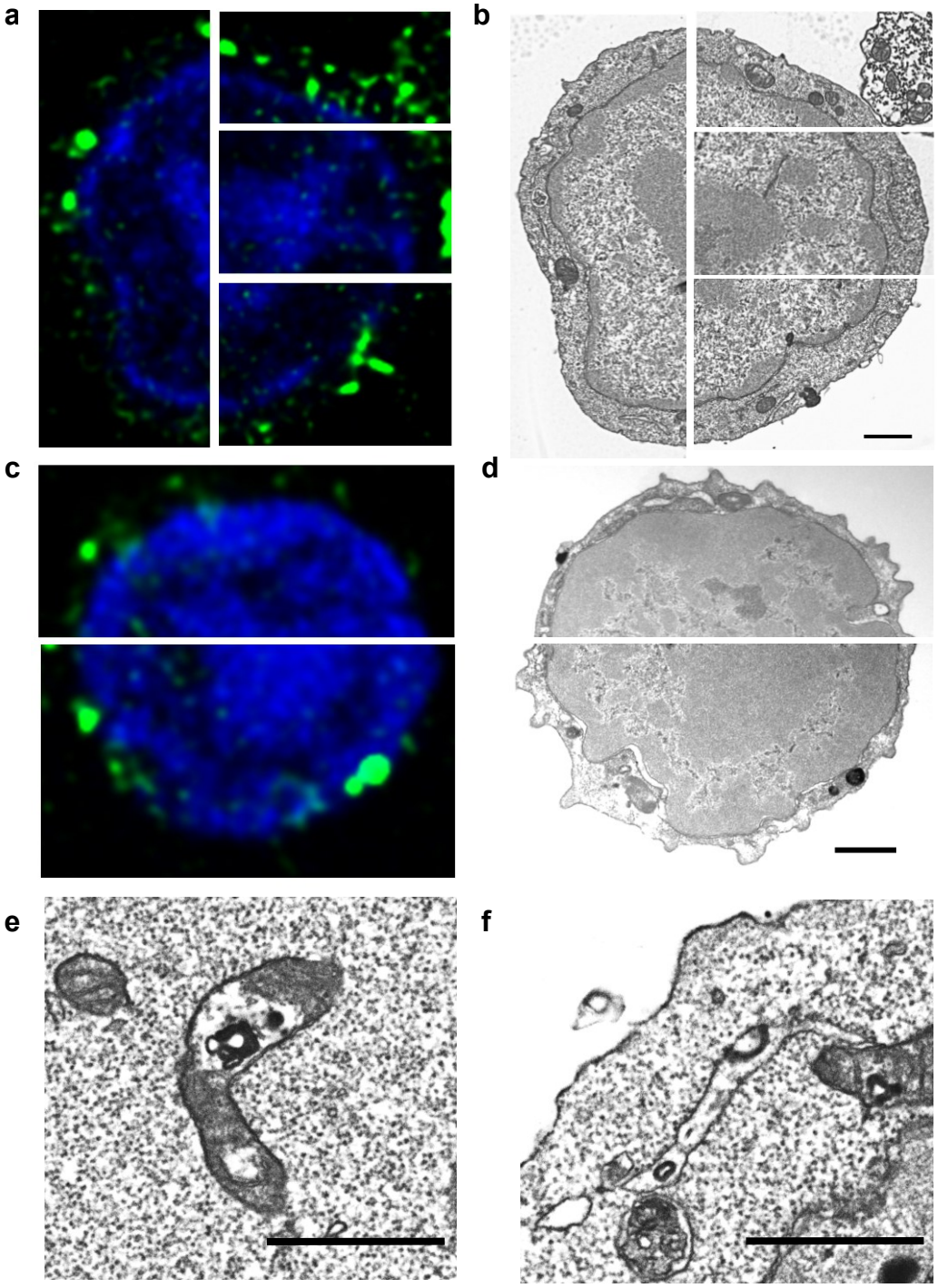

Supplementary Figure 1. Side-by-side image separation of correlative fluorescence and electron microscopy and immune-electron microscopy with subcellular localization of CXCR4 in erythroblasts. **a,b** correspond to the Figure 2f. **a,** Confocal immunofluorescence microscopy shows anti-CXCR4-AF488 (green) immunoreactivity and Hoechst DNA staining (blue) in an erythroblast with four segments of the same cell at different z-depth. The fluorescent signal was detected in 0.3 µm optical confocal microscopy sections. **b,** Electron microscopy images of the same erythroblast as in (**a**) at corresponding z-depth. Scale bar, 1 µm. **c,d** correspond to the Extended Data Figure 3a. **c,** Confocal immunofluorescence microscopy image anti-CXCR4-AF488 (green) immunoreactivity and Hoechst DNA staining (blue) in an erythroblast showing two segments of the same cell at different z-depth. The fluorescent signal was detected in 0.3 µm optical confocal microscopy sections. **d,** Electron microscopy of the same erythroblast as in (**c**), with rat anti-CXCR4-AF488 and a horseradish peroxidase (HRP)-labeled goat-anti-rat Ig antibody. The HRP was visualized by its substrate 3,3-diaminobenzidine (DAB) that was biocatalyzed to form an electron-dense precipitate detected in ultrathin sections by transmission electron microscopy. Scale bar, 1 µm. **e,f,** CXCR4-associated signal in erythroblasts detected in transmission electron microscopy as an electron-dense DAB precipitate in **e,** mitochondria, in **f,** endoplasmic reticulum. Scale bars, 1 µm.