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Niemann-Pick C2 protein regulates sterol transport between plasma membrane and late endosomes in human fibroblasts

Running title: Sterol transport in NPC2 deficient fibroblasts

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Highlights

- Plasma-membrane derived sterol is transported to late endosomes/lysosomes but becomes trapped in these organelles in NPC2 deficient cells.
- A small sterol pool remains mobile as shown by fluorescence recovery after photobleaching (FRAP).
- Quantitative lipid mass spectrometry reveals NPC2-dependent but little esterification of plasma-membrane derived sterol.