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scientific reports

Published online: 06 October 2022

OPEN Author Correction: Isolation of large dense-core vesicles from bovine adrenal medulla for functional studies

Yelda Birinci, Julia Preobraschenski, Marcelo Ganzella, Reinhard Jahn & Yongsoo Park 🕑

Correction to: Scientific Reports https://doi.org/10.1038/s41598-020-64486-3, published online 05 May 2020

The original version of this Article contained an error in Figure 4, where the label of the X-axis 'Size (nm)' in panel (a) was incorrectly given as 'Time (min)'. The original Figure 4 and accompanying legend appear below.

The original Article has been corrected.

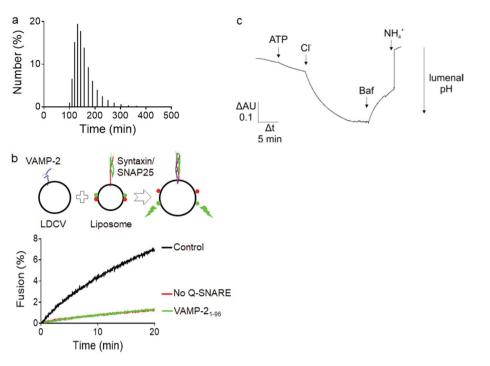


Figure 4. Biophysical and biochemical properties of purified LDCVs. (a) Size distribution of purified LDCVs analyzed using dynamic light scattering. The histogram shows the numbers as percentage of total. Average diameter of LDCVs is 153.7 nm, with a standard deviation (SD) of 42.2 nm. (b) Fusion of LDCVs with liposomes containing SNARE acceptor complexes. Fusion was measured by dequenching of labeled membrane lipids (lipid mixing)^{18,22,28} (top). Plasma membrane-mimicking liposomes contain phospholipids labelled with NBD (green fluorescence) and rhodamine (red fluorescence). The stabilized O-SNARE complex (syntaxin-1A and SNAP-25A) called the deltaN complex 23 is reconstituted in liposomes that mimic the plasma membrane. Fluorescence resonance energy transfer (FRET) between the two fluorophore-labeled lipids is reduced after LDCV fusion due to lipid dilution by unlabeled lipids of LDCVs, thus de-quenching the donor fluorescence. Soluble synaptobrevin-2 (VAMP-21.96) and omission of SNAREs in liposomes prevented lipid mixing (bottom). Fluorescence values are normalized as a percentage value of the maximum donor fluorescence induced by 0.1% (vol/vol) Triton X-100 (TX-100) detergent treatment at the end of experiments. (c) ATP and Cl dependent acidification in LDCVs. LDCV acidification was monitored using 1 mM acridine orange as a reporter dye. The reaction was started by the addition of 1.2 mM MgATP followed by 50 mM KCl. Addition of 0.2 µM of the V-ATPase inhibitor Bafilomycin results in luminal re-alkalinization, indicating V-ATPase-specific proton pumping. The reaction was stopped by adding 15 mM (NH₄)₂SO₄ which equilibrates the luminal pH with that of the medium.

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