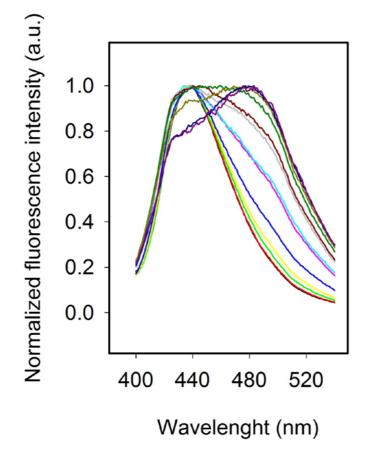
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Supporting Material

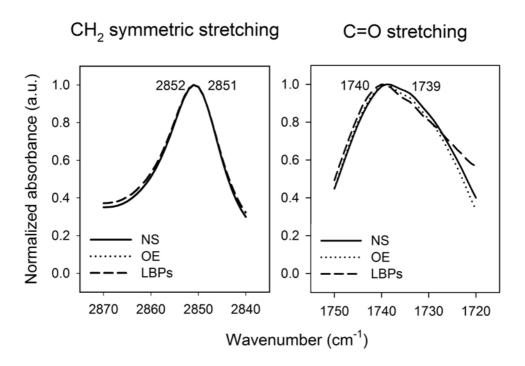
Pneumocytes Assemble Lung Surfactant as Highly Packed/Dehydrated States with Optimal Surface Activity

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Supplementary Figure S1. Thermotropic profile of membrane suspensions reconstituted from OE, the organic extract of native surfactant purified as measured by LAURDAN spectroscopy. Fluorescence emission spectra of LAURDAN in suspensions of the surfactant organic extract (OE), recorded at 10 °C (—), 15 °C (—), 20 °C (—), 25 °C (—), 30 °C (—), 35 °C (—), 37 °C (—), 40 °C (—), 42 °C (—), 45 °C (—), 50 °C(—), 55 °C(—) and 60 °C(—).



Supplementary Figure S2. ATR-FTIR spectra of NS (—), OE (……) and LBPs (----) membranes at spectral regions sensitive to the CH_2 symmetric stretching band (left panel) and the C=O stretching band (right panel). Numbers indicate the wavenumber at the maximum of each peak to highlight the shift between the different surfactant materials. Data shown are means \pm standard deviation from 3 independent experiments