

1 **Immortalisation of primary human alveolar epithelial lung cells using a non-viral vector to study respiratory bioreactivity *in vitro***

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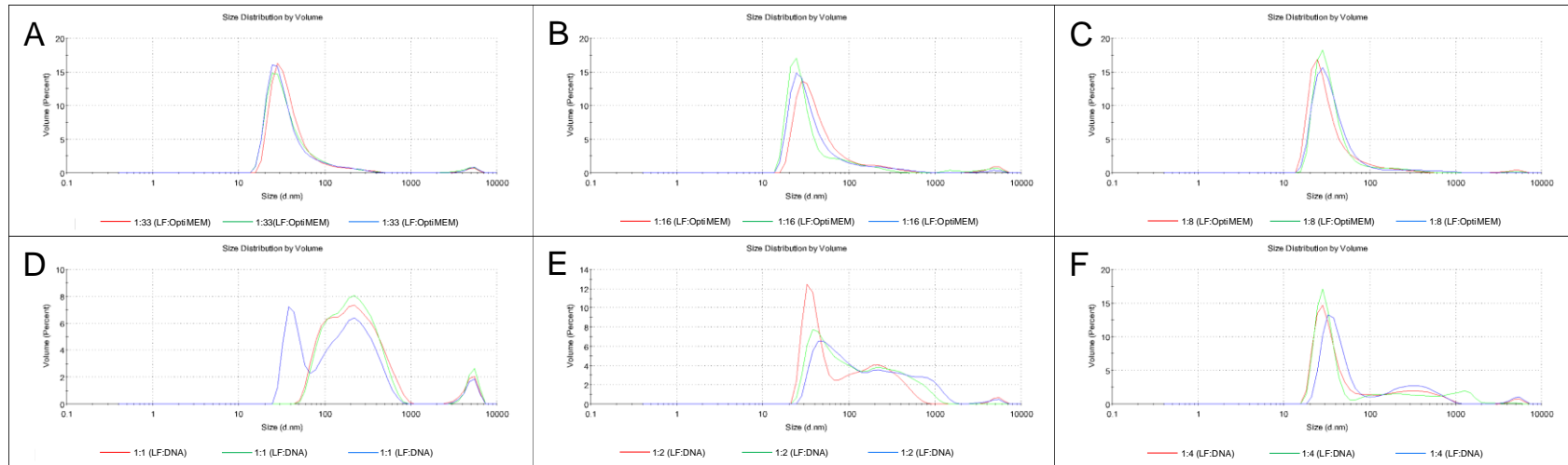
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16 **Supplementary Information**

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18 **Figure S1.** Hydrodynamic size measured by DLS of LF in Opti-MEM medium at 1:33, 1:16 and 1:8 (LF: Opti-MEM) (A-C) and of LF-DNA

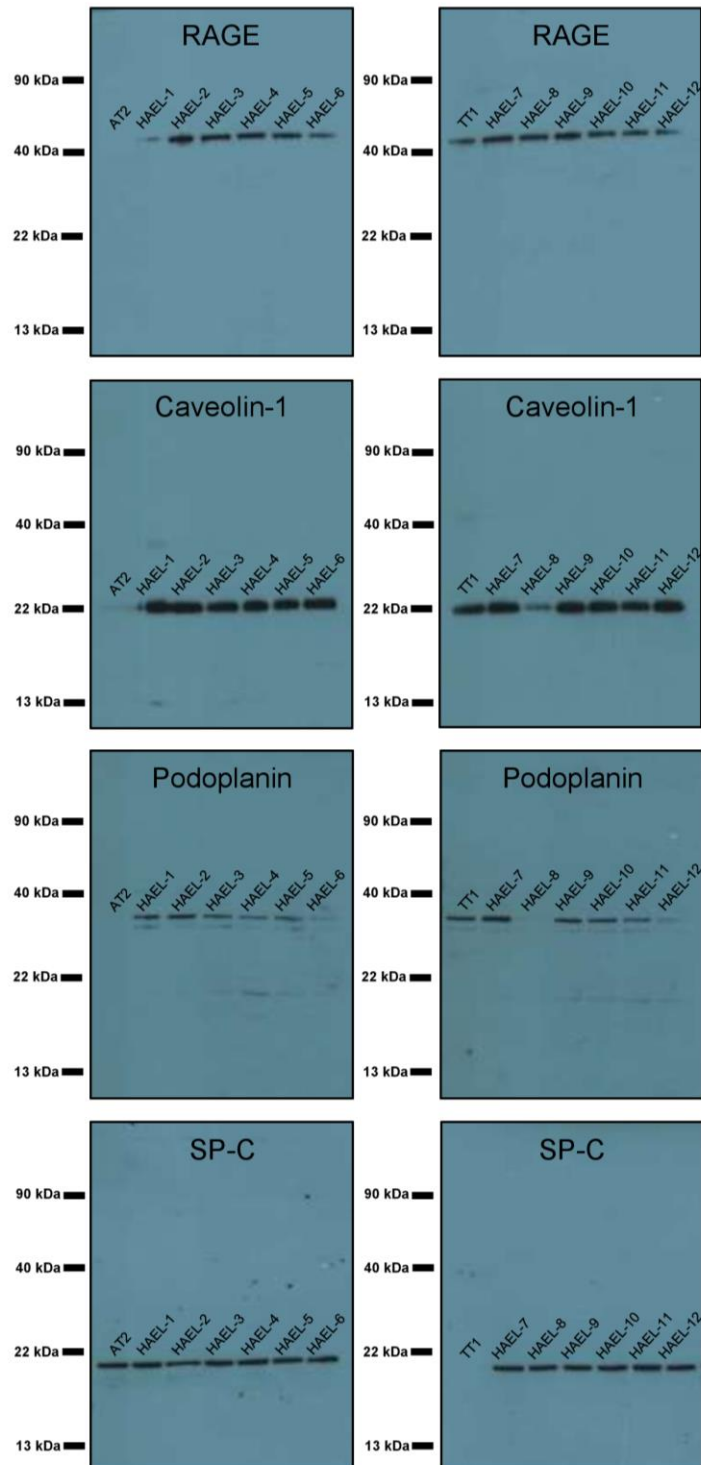
19 nanomeric complexes at 1:1, 1:2 and 1:4 (LF:DNA) dilution ratios. n = 3 replicates per sample.



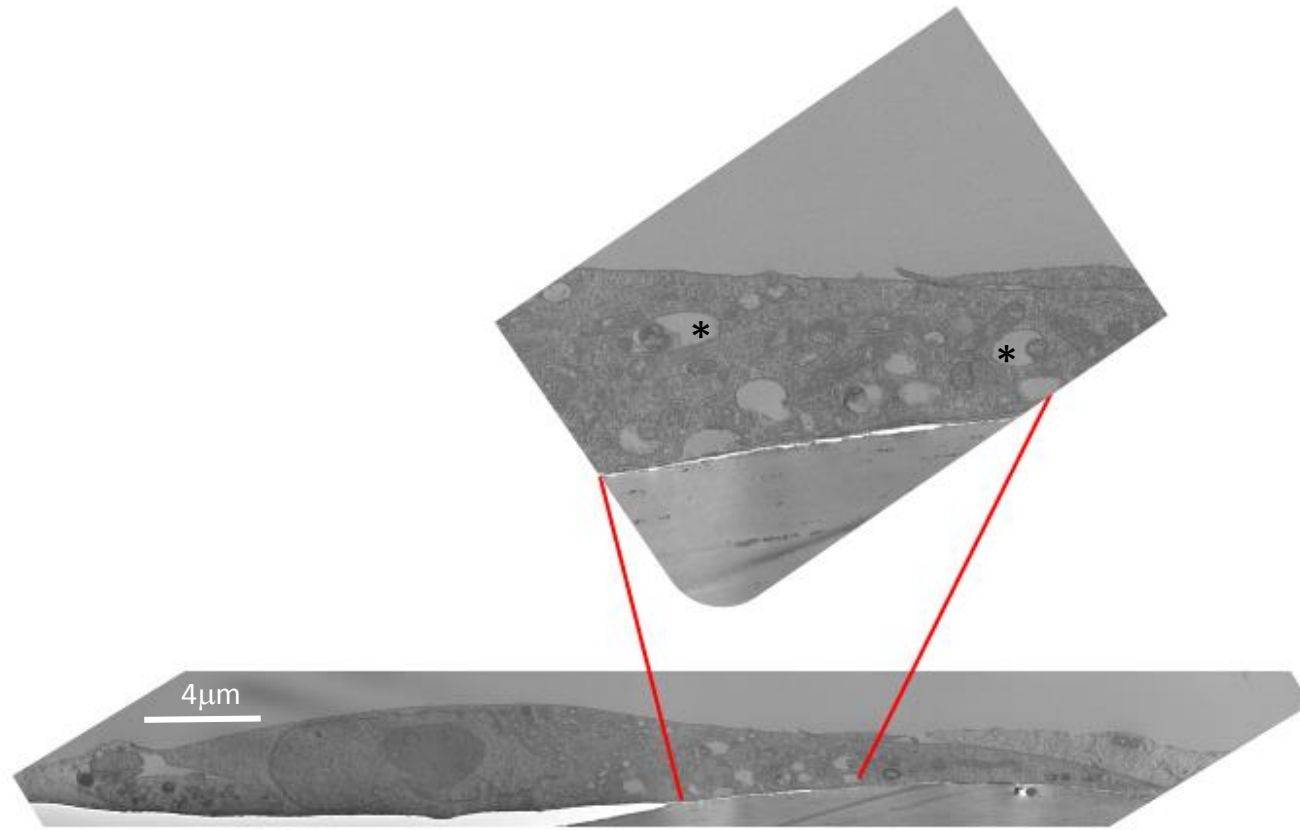
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22 **Figure S2.** Full-length original and unprocessed immunoblots of RAGE, caveolin-1,
23 podoplanin and SP-C in ICs, TT1 cell line and primary AT2 cells. Loading protein
24 concentrations were adjusted to 50 μ g per sample.



26 **Figure S3.** A cell showing structures resembling lamellar bodies (*) but flattened AT1 morphology, thus showing both AT1 and AT2 characteristics,



32 **Table S1.** Target genes and primer sequences used for the qPCR analysis and their respective functions in the lung tissue.

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Target gene	Gene name	Gene ID	Accession number	Forward primer (5'-3')	Reverse primer (3'-5')	Function
RAGE	<i>AGER</i>	177	NM_001136.4	CTACCGAGTCCGTGTCTACC	TTCTCATTAGGCACCAGGGG	Inflammatory response
Caveolin-1	<i>CAVI</i>	857	NM_001753.4	CGTAGACTCGGAGGGACAT	GTTGAGGTGTTTAGGGTCGC	Transepithelial transport
SP-C	<i>SFTPC</i>	6440	NM_003018.3	CCTGAGTGAGCACCTGGTTA	TCAAGACTGGGGATGCTCTC	Maintenance of alveolar homeostasis

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44 **Table S2.** Primary and secondary antibodies and their respective dilutions used for Western blot analysis.

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	Primary antibody	dilution factor	Secondary antibody	dilution factor
RAGE	Rabbit polyclonal anti-human receptor for advanced glycation endproducts (Abcam, Cambridge, UK)	1:10,000	Polyclonal goat anti-rabbit (Dako, Ely, UK)	1:25,000
Caveolin-1	Rabbit polyclonal anti-human caveolin-1 (Abcam, Cambridge, UK)	1:1,000	Polyclonal goat anti-rabbit (Dako, Ely, UK)	1:25,000
Podoplanin	Mouse monoclonal anti-human podoplanin (Abcam, Cambridge, UK)	1:10,000	Polyclonal goat anti-mouse (Dako, Ely, UK)	1:25,000
SP-C	Rabbit polyclonal anti-human prosurfactant protein C (Abcam, Cambridge, UK)	1:10,000	Polyclonal goat anti-rabbit (Dako, Ely, UK)	1:25,000

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