

Figure S1. 12% SDS-PAGE analysis of the recombinant proteins. The proteins OmpL1, OmpL37, LipL21, LipL41 and LipL46 were expressed in *Escherichia coli* using the pET-SUMO vector. After purification using immobilized metal affinity chromatography, the fusion proteins were cleaved using the enzyme Ulp-1. Proteins were isolated from the SUMO tag and Ulp-1 by a second chromatographic step. Lanes were represented by M: molecular mass marker, 1: OmpL1, 2: OmpL37, 3: LipL21, 4: LipL46 and 5: LipL41.

Figure S2. The effect on the binding of increasing concentration of recombinant proteins to endothelial cell monolayers. Ninety-six-well plate were seeded with 10^5 cell/well at 37°C under 5% CO₂ for 24 h. Proteins were added in cell media with 1 µM aprotinin for 2 h. Binding was fixed with 2% paraformaldehyde for 30 min at room temperature. Polyclonal antibodies against the recombinant proteins (1:5,000) were added for 1 h. Reaction was detected with anti-mouse IgG-peroxidase (1:5,000). The dose-dependent curves were fitted using the GraphPad Prism software. Bars and points represent the mean absorbance at 492 nm \pm SD of three replicates. A: EA.hy926 and OmpL1, B: HMEC-1 and OmpL1, C: HMEC-1 and LipL41, D: HULEC5a and OmpL1, E: HULEC5a and LipL46 and F: EA.hy926 and LipL41.

Figure S3. The effect on the binding of increasing concentration of recombinant proteins to epithelial cell monolayers. Ninety-six-well plate were seeded with 10^5 cell/well at 37°C under 5% CO₂ for 24 h. Proteins were added in cell media with 1 µM aprotinin for 2 h. Binding was fixed with 2% paraformaldehyde for 30 min at room temperature. Polyclonal antibodies against the recombinant proteins (1:5,000) were added for 1 h. Reaction was detected with anti-mouse IgG-peroxidase (1:5,000). The

dose-dependent curves were fitted using the GraphPad Prism software. Bars and points represent the mean absorbance at 492 nm \pm SD of three replicates. A: HEK293T and OmpL37, B: HEK293T and OmpL1, C: HEK293T and LipL21, D: HEK293T and LipL41, E: HEK293T and LipL46, F: MDBK and OmpL1, G: MDBK and LipL41 and H: MDBK and LipL46.

Figure S4. The effect on the binding of increasing concentration of recombinant proteins to fibroblast cell monolayers. Ninety-six-well plate were seeded with 10^5 cell/well at 37°C under 5% CO₂ for 24 h. Proteins were added in cell media with 1 μ M aprotinin for 2 h. Binding was fixed with 2% paraformaldehyde for 30 min at room temperature. Polyclonal anti-bodies against the recombinant proteins (1:5,000) were added for 1 h. Reaction was detected with anti-mouse IgG-peroxidase (1:5,000). The dose-dependent curves were fitted using the GraphPad Prism software. Bars and points represent the mean absorbance at 492 nm \pm SD of three replicates. A: E. Derm and OmpL1, B: E. Derm and LipL41, C: BHK-21 and OmpL1, and D: BHK-21 and LipL41.

Figure S1

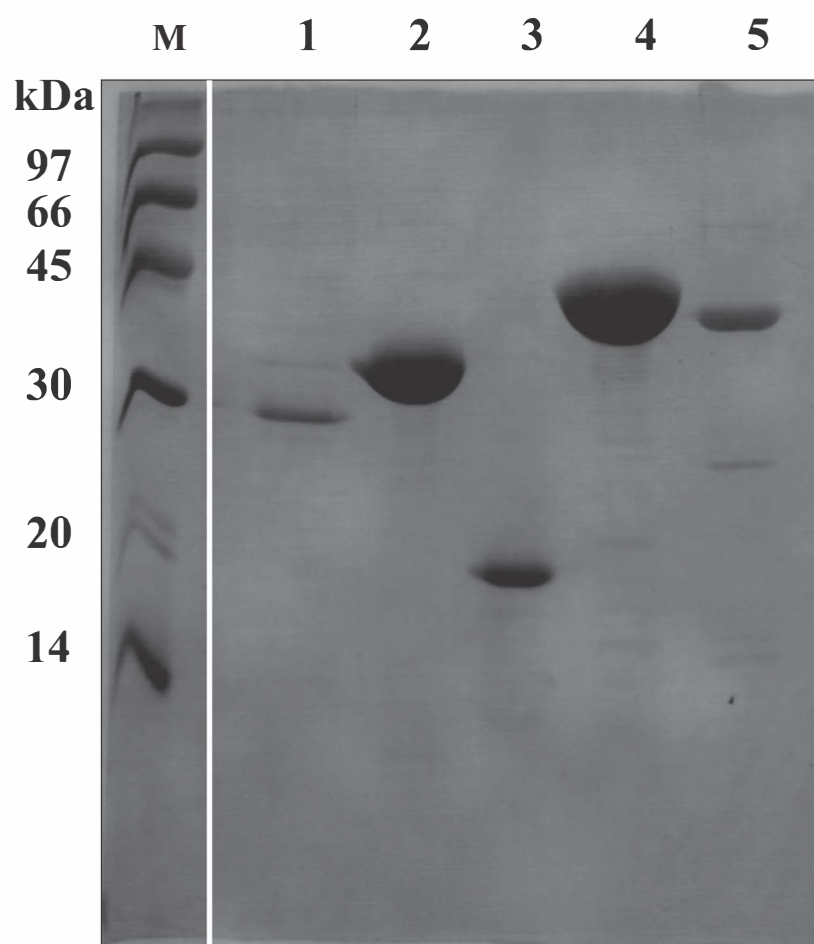
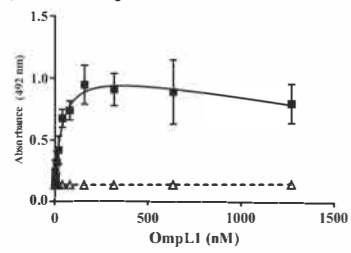
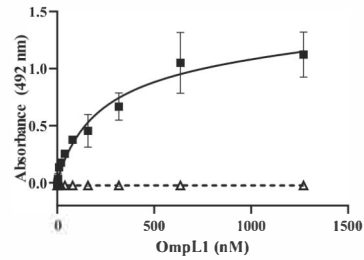


Figure S2

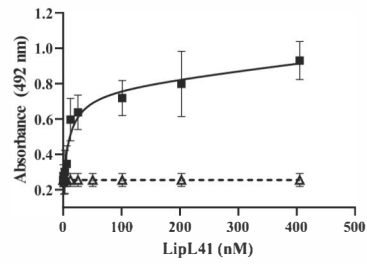
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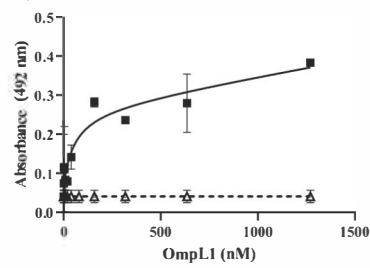
B) HMEC-1



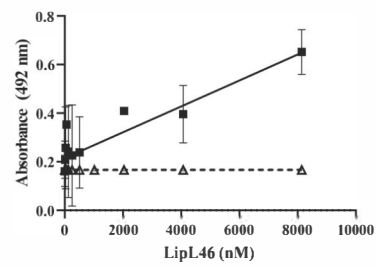
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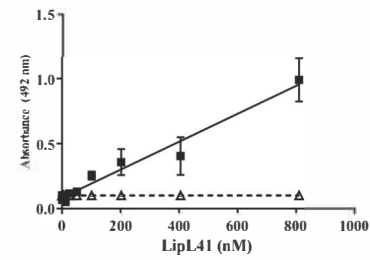
D) HULEC5a



E) HULEC5a



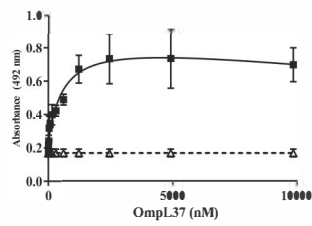
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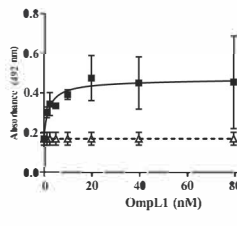
—△— Cell + Antibodies
—■— Cell + Protein + Antibodies

Figure S3

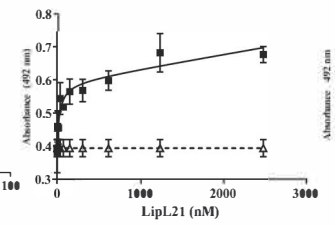
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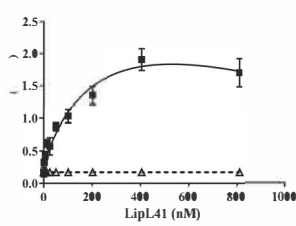
B) HEK293T



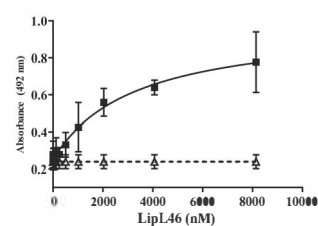
C) HEK293T



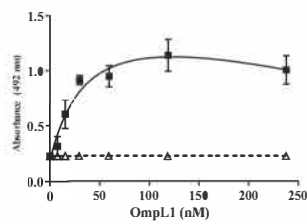
D) HEK293T



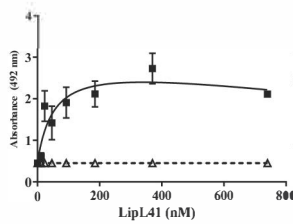
E) HEK293T



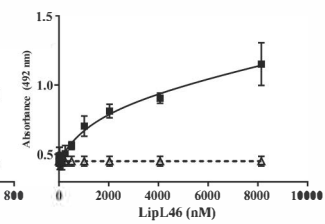
F) MDBK



G) MDBK



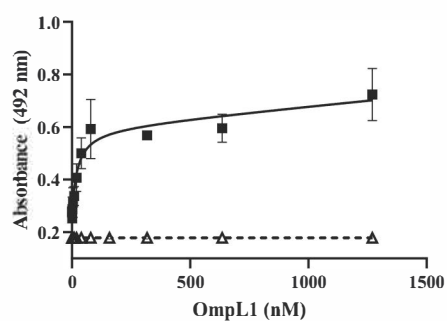
H) MDBK



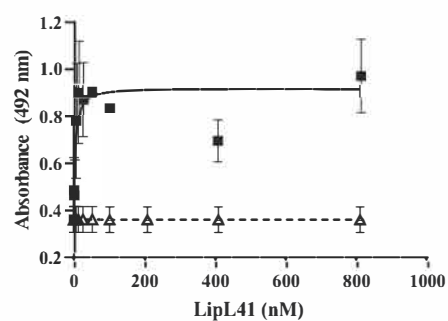
▲ Cell + Antibodies
 ■ Cell + Protein + Antibodies

Figure S4

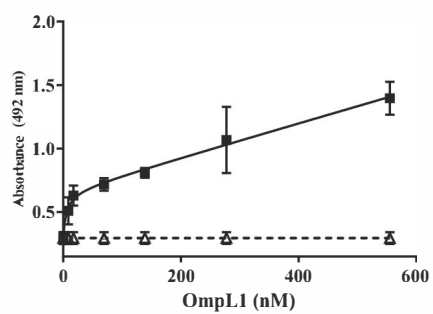
A) E. Derm



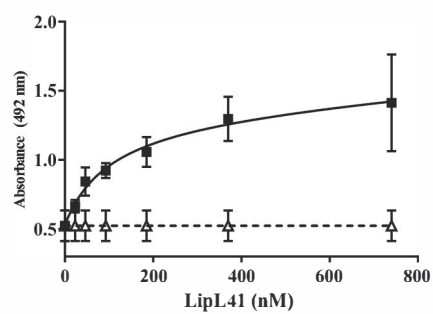
B) E. Derm



C) BHK-21



D) BHK-21



—▲— Cell + Antibodies
—■— Cell + Protein + Antibodies

Table S1. Primers used to amplify the genes of interest

Gene	Sequences
LipL21	<i>Forward 5' CGC GAATTC TCCAGTACTGACACAGGA 3' (EcoRI)</i> <i>Reverse 5' GGCG CTCGAG TTATTGTTTGGAAACCTC 3' (XhoI)</i>
LipL41	<i>Forward 5' GCG GAATTC GCAGCTACAGTCGATGTAGAA 3' (EcoRI)</i> <i>Reverse 5' CGCG CTCGAG TTACTTTGCGTTGCTTTCATC 3' (XhoI)</i>
LipL46	<i>Forward 5' ATT GAGCTC GGTTCTTCCGGTTCCACT 3' (SacI)</i> <i>Reverse 5' CGGC GTCGAC TTATTTCAAAGGTTTGAA 3' (Sall)</i>
OmpL1	<i>Forward 5' GCCG GAATTC ATCACCAAAGATGGTTTA 3' (EcoRI)</i> <i>Reverse 5' CGCG CTCGAG TTAGAGTTCGTGTTTATA 3' (XhoI)</i>
OmpL37	<i>Forward 5' CTG GAATTC GTTTCGCCGGATCAGATC 3' (EcoRI)</i> <i>Reverse 5' GCGCC CTCGAG TTAATTTTGTGTTTTTGT 3' (XhoI)</i>