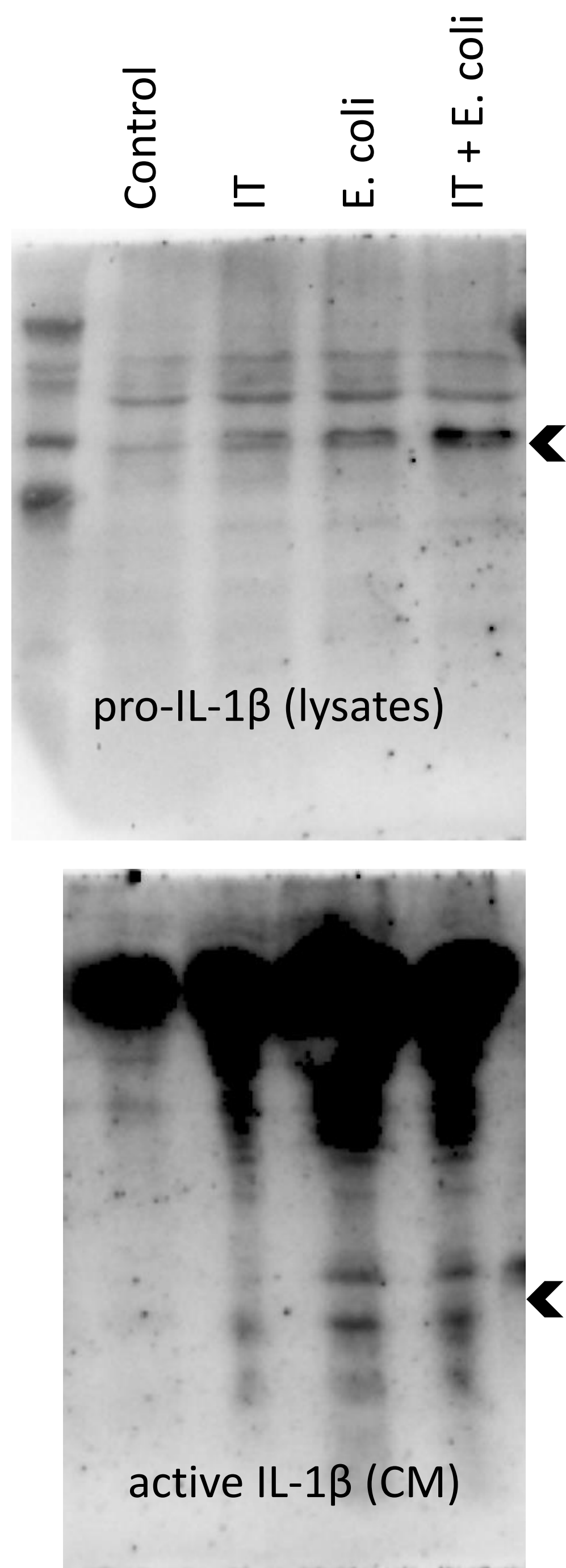
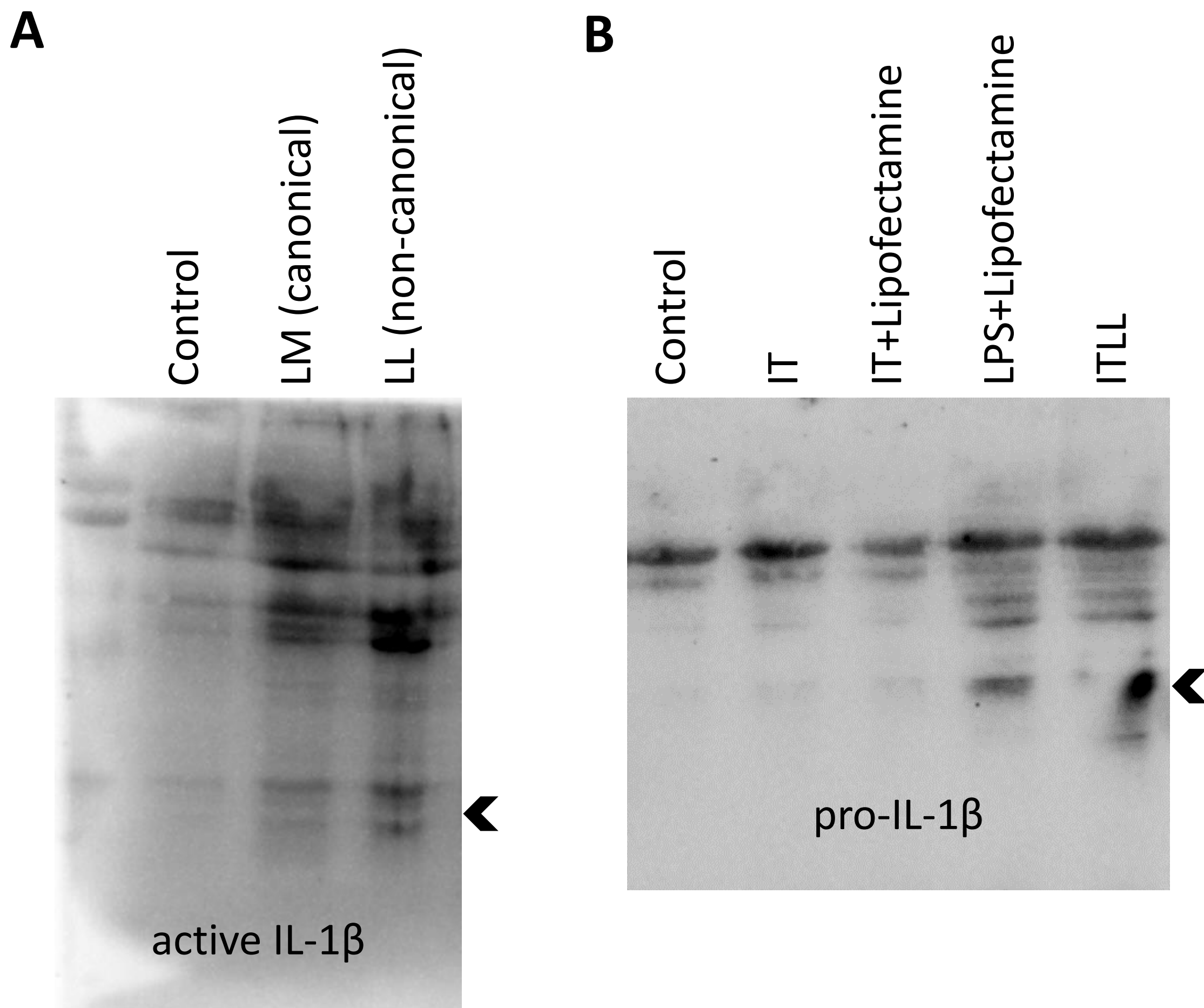


## Supplementary figure S1



**Supplementary figure S1.** CECs secrete active IL-1 $\beta$  in response to *E. coli* infection. Uncropped blots of **Figure 1A**.

## Supplementary figure S2



**Supplementary figure S2.** CECs secrete active IL-1 $\beta$  in response to canonical and noncanonical inflammasome activation.

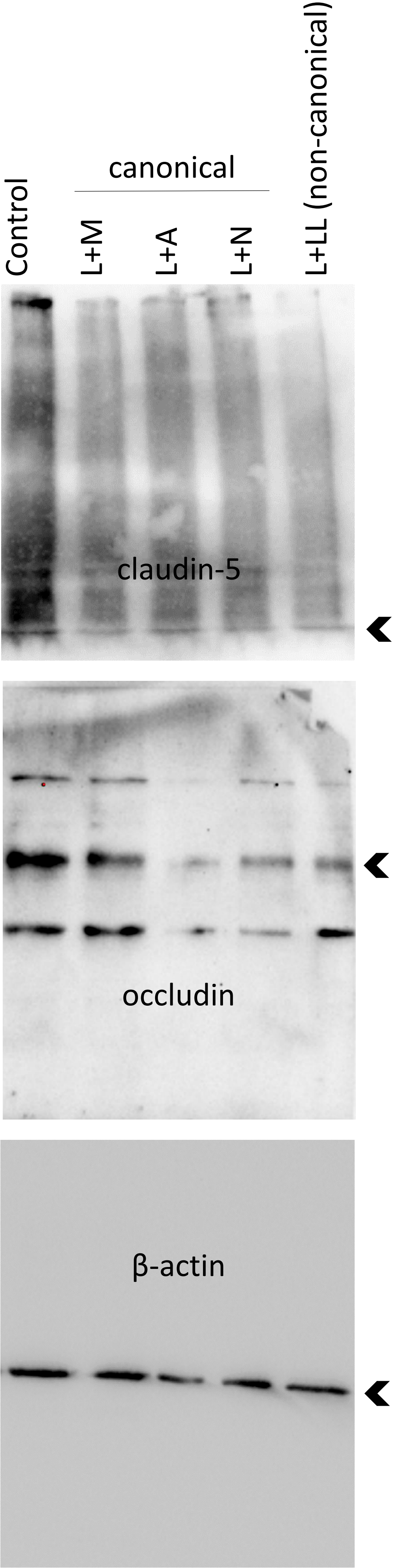
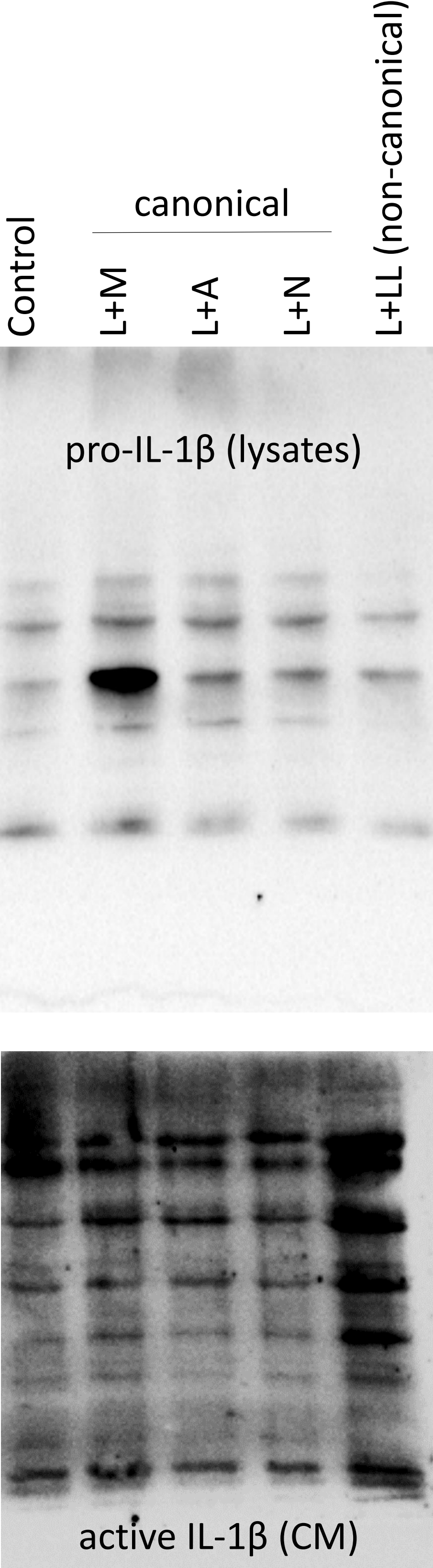
(A) Uncropped blots of **Figure 1B**.

(B) Representative Western blot showing that Lipofectamine alone does not induce IL-1 $\beta$  upregulation. D3 cells were treated with:

- 1000 U/mL interferon/IFN- $\gamma$  + 10 ng/mL tumour necrosis factor/TNF- $\alpha$  (IT)
- IT and Lipofectamine (5  $\mu$ l/well in a 6-well plate)
- 2  $\mu$ g/mL LPS and Lipofectamine
- IT + LPS + Lipofectamine (ITLL).



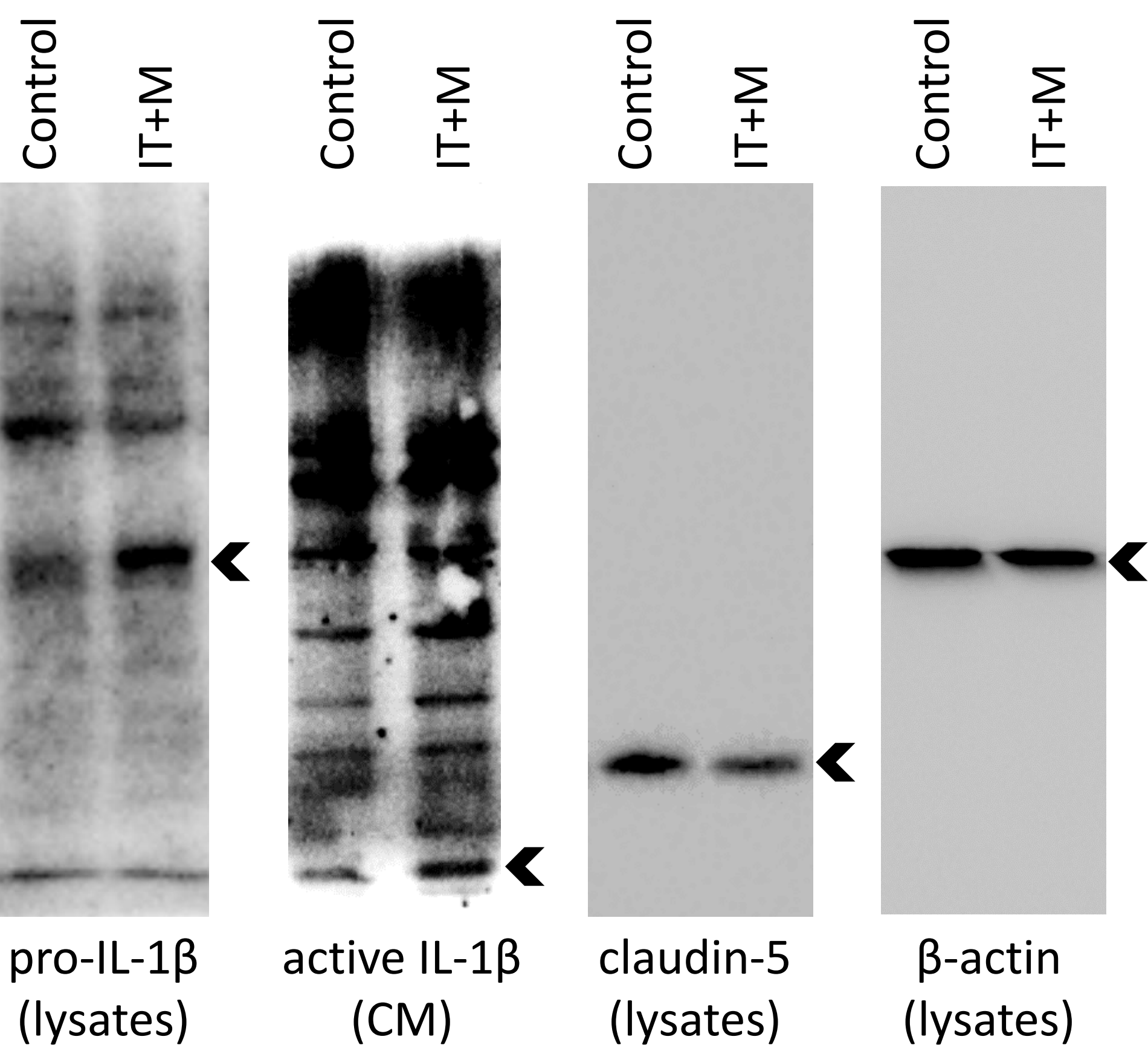
Supplementary figure S3



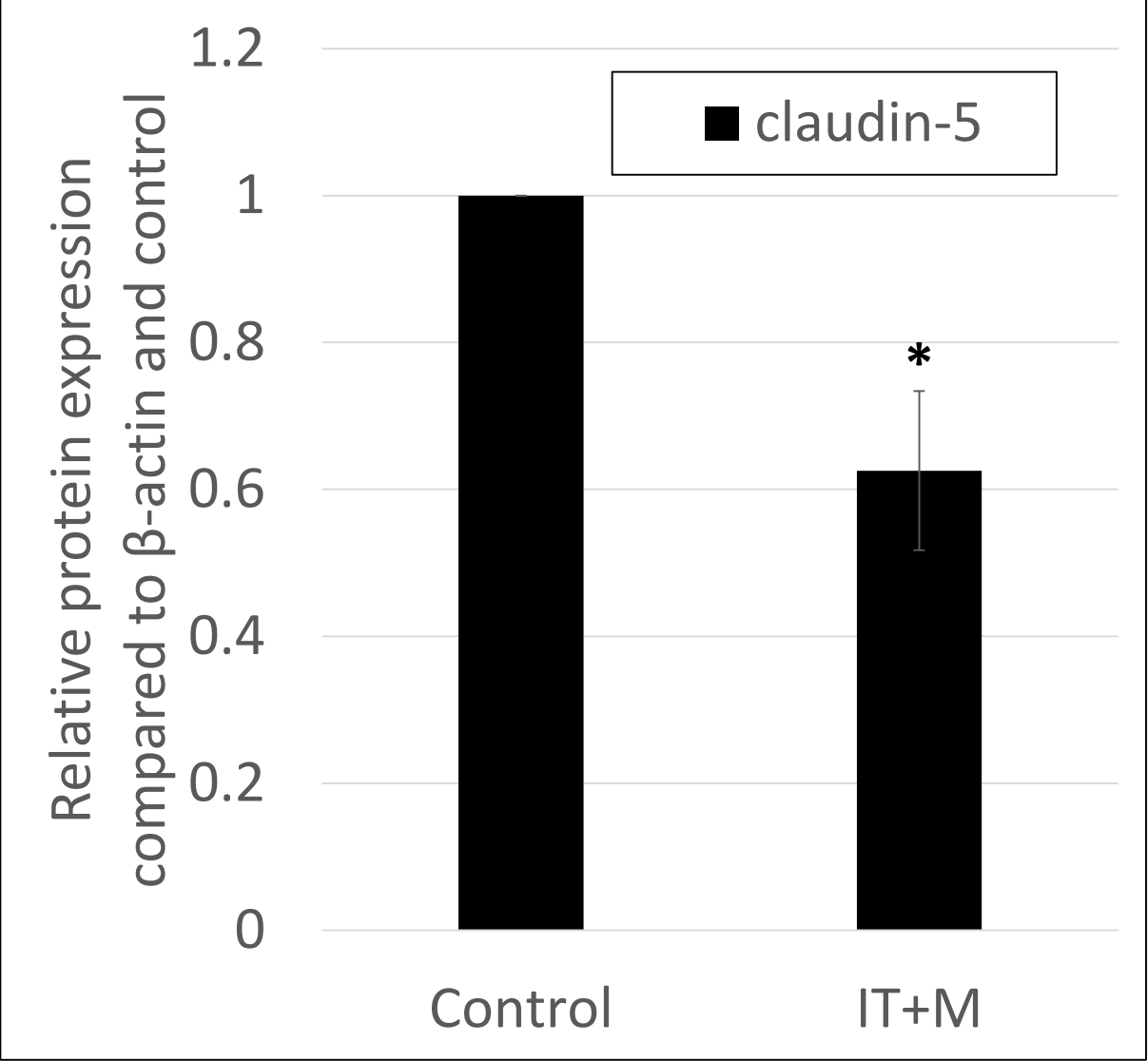
**Supplementary figure S3.** Canonical and noncanonical inflammasome activation induce active IL-1 $\beta$  secretion and TJ disruption in CECs. Uncropped blots of **Figure 1D**.

Supplementary figure S4

A



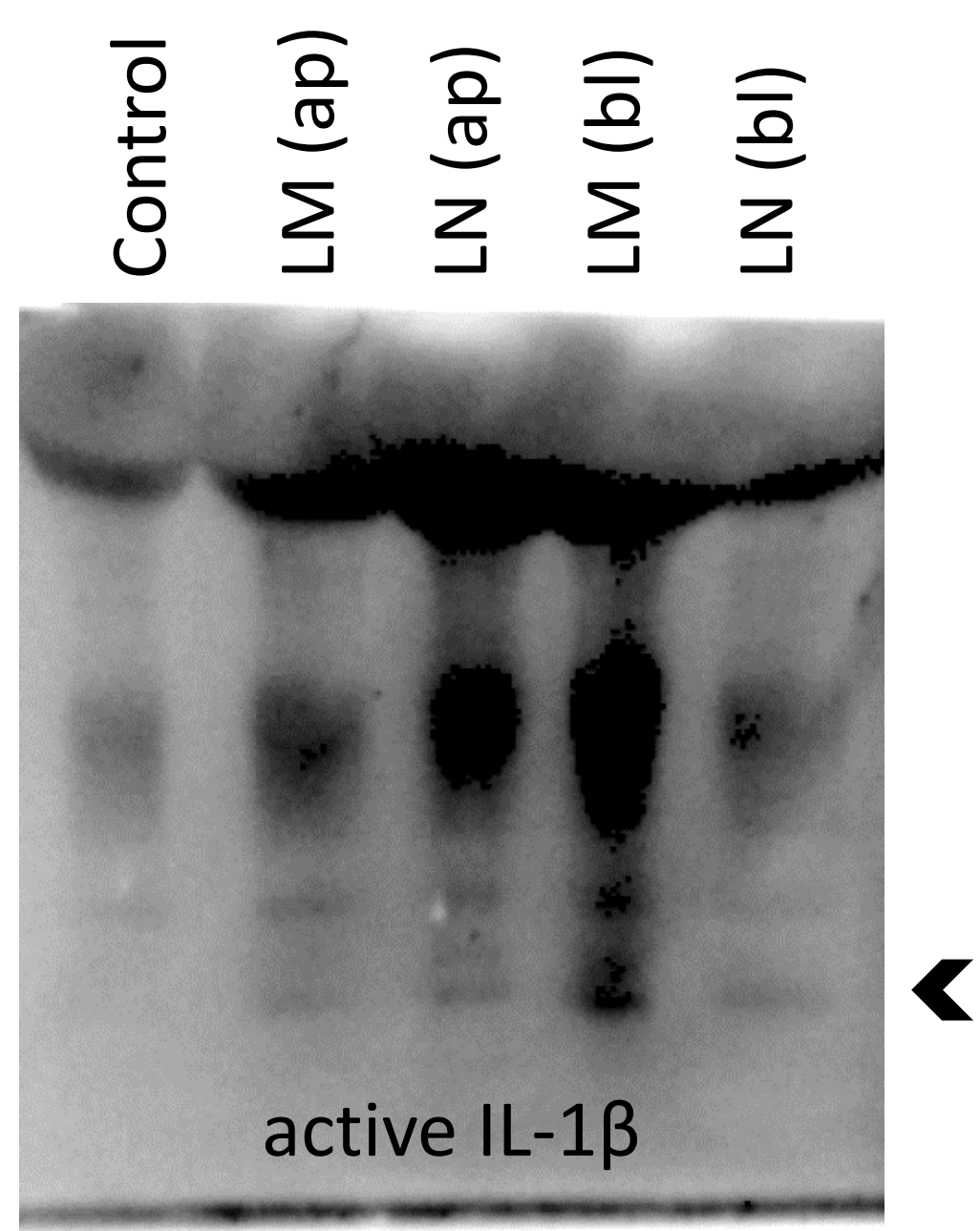
B



**Supplementary figure S4.** IFN- $\gamma$  + TNF- $\alpha$  and MDP induce active IL-1 $\beta$  secretion and TJ disruption in CECs. (A) Uncropped blots of **Figure 1D**. (B) Quantification of claudin-5 expression (average +/- SEM, N = 3, \* p < 0.05, as assessed by Student's t-test).

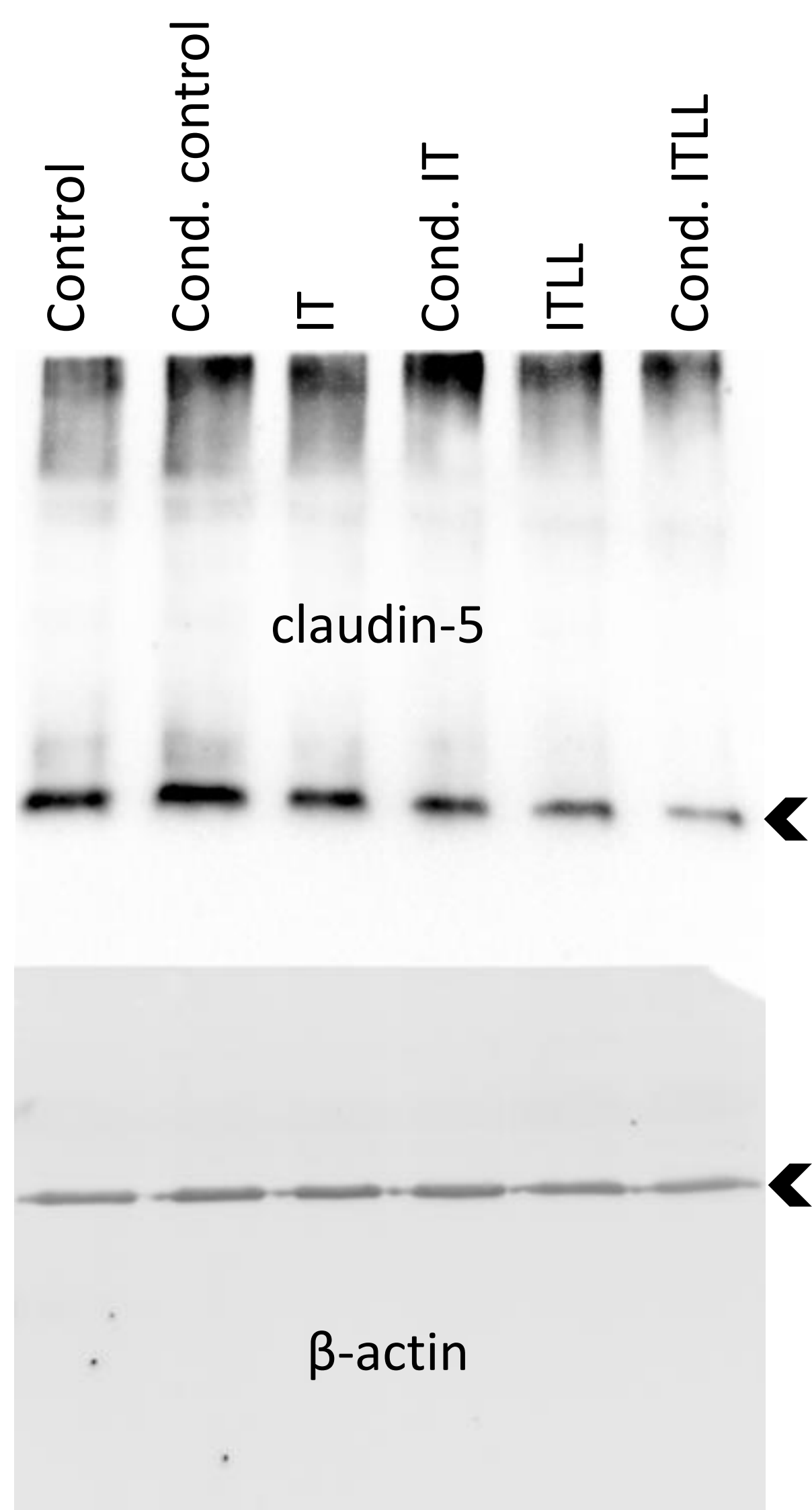


Supplementary figure S5



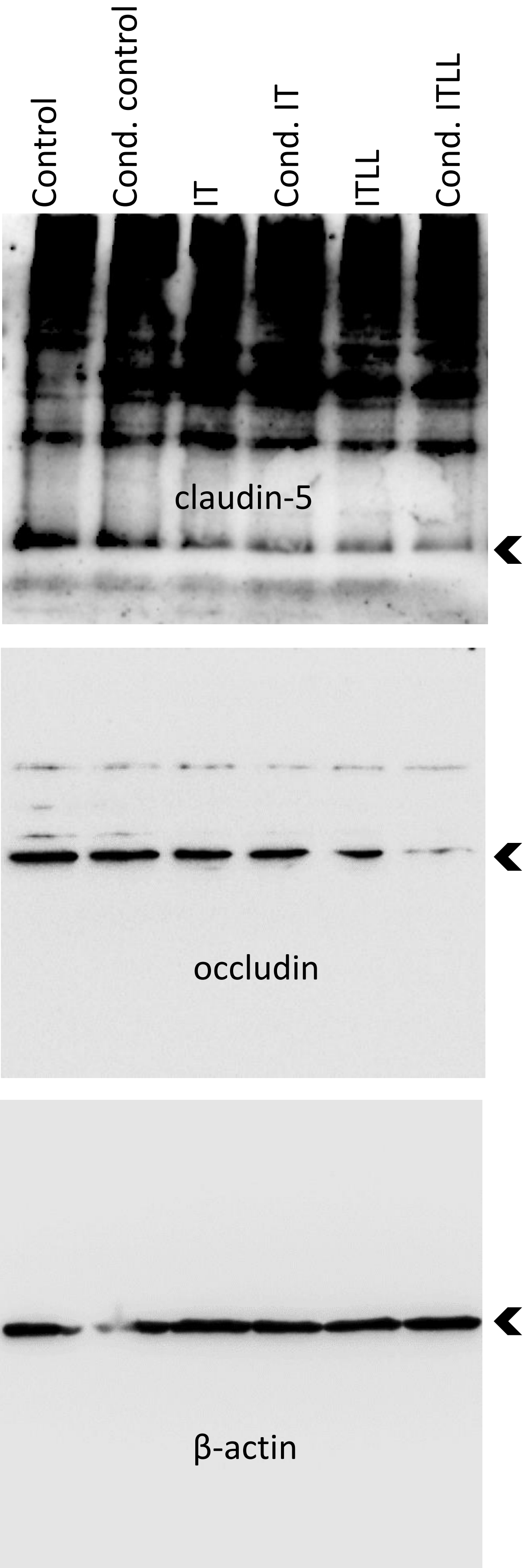
**Supplementary figure S5.** CECs respond to both apical and basolateral inflammatory stimuli.  
Uncropped blots of **Figure 2A**.

Supplementary figure S6



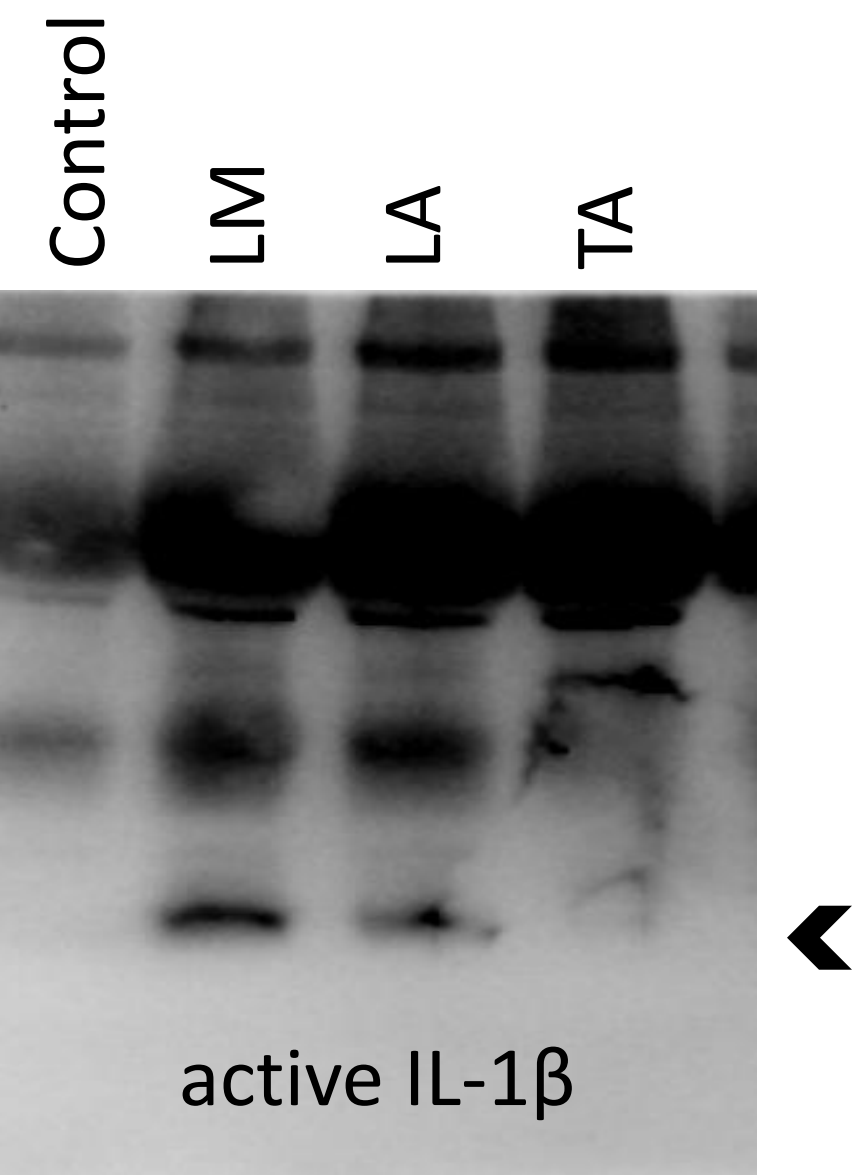
**Supplementary figure S6.** Inflammatory stimuli released by pericytes alter barrier properties of PBECs.  
Uncropped blots of **Figure 3A**.

Supplementary figure S7



**Supplementary figure S7.** Inflammatory stimuli released by pericytes alter barrier properties of D3 cells.  
Uncropped blots of **Figure 3B**.

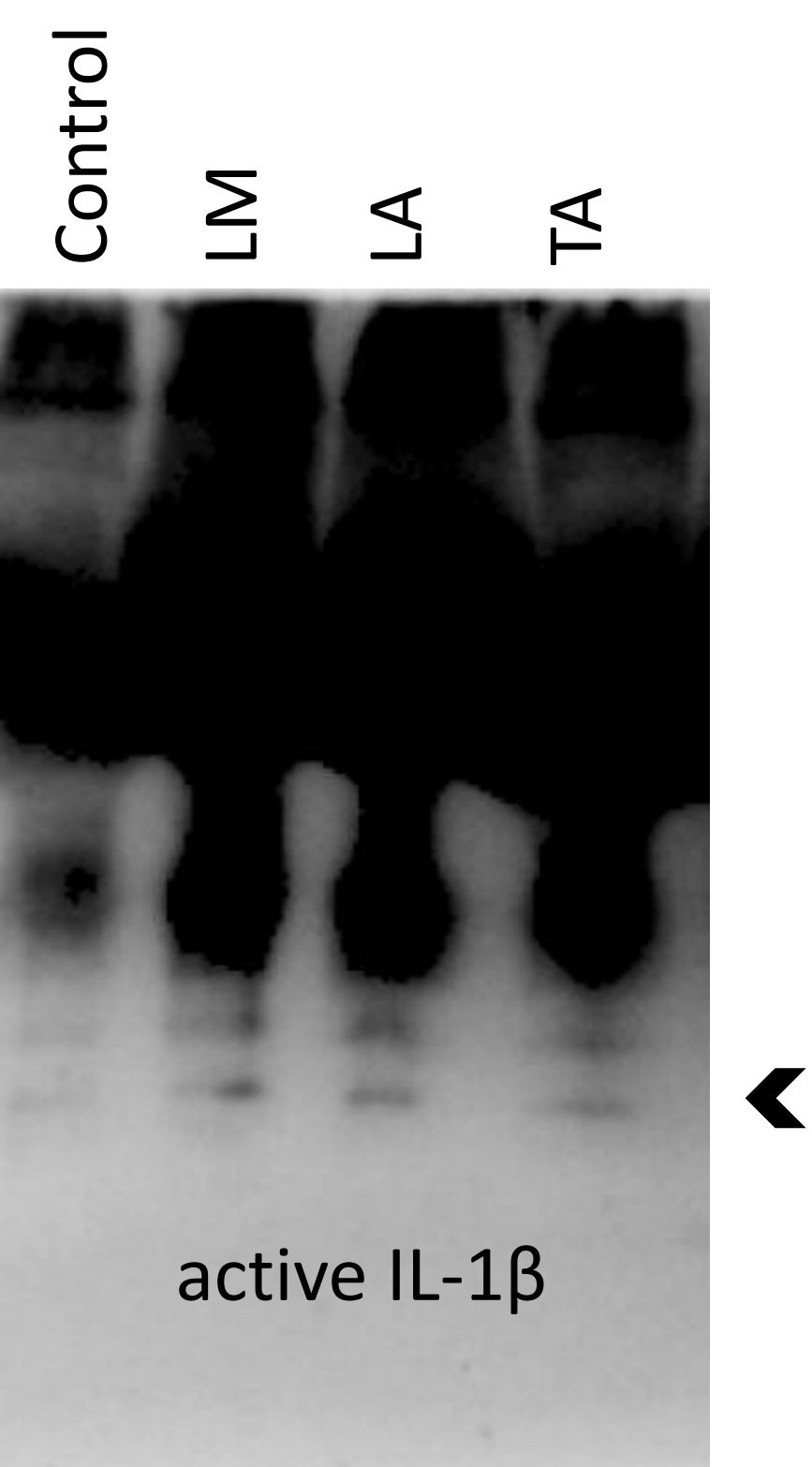
Supplementary figure S8



**Supplementary figure S8. Activated CECs secrete inflammatory mediators into the apical direction.**  
Uncropped blots of **Figure 5A**.



Supplementary figure S9



**Supplementary figure S9.** Activated CECs secrete inflammatory mediators into the basolateral direction.  
Uncropped blots of **Figure 5B**.