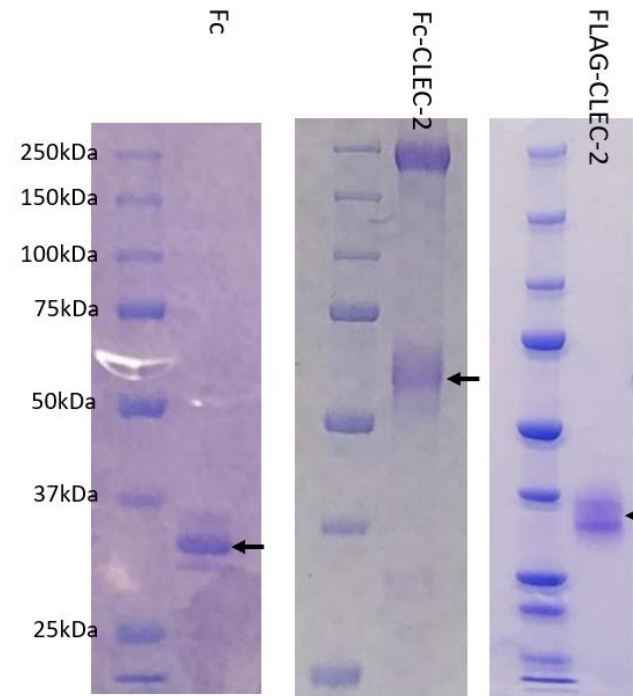
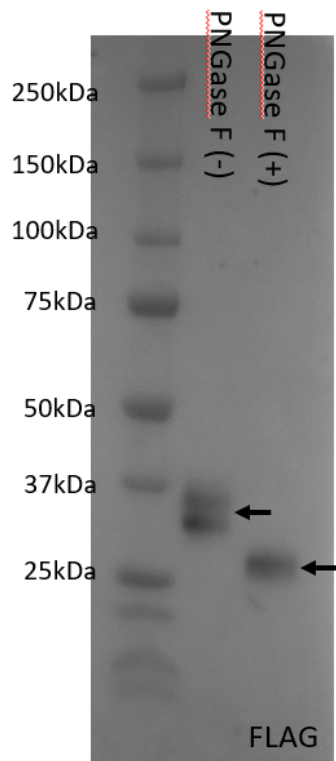


Supplementary Figure.1

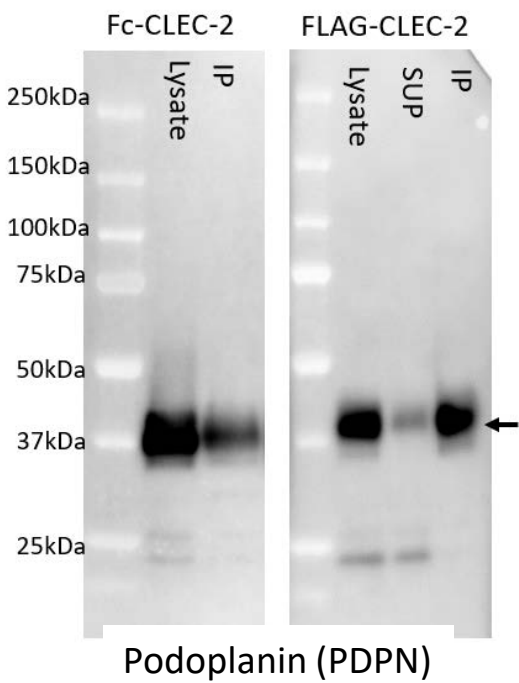
A.



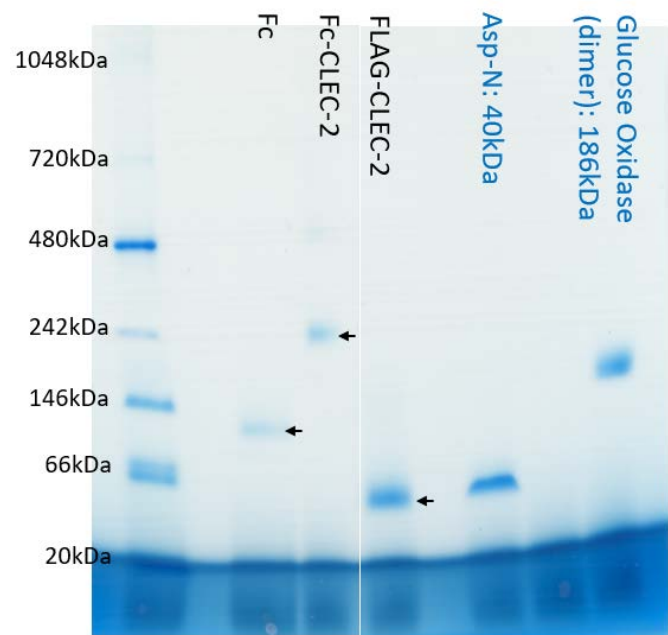
B.



C.



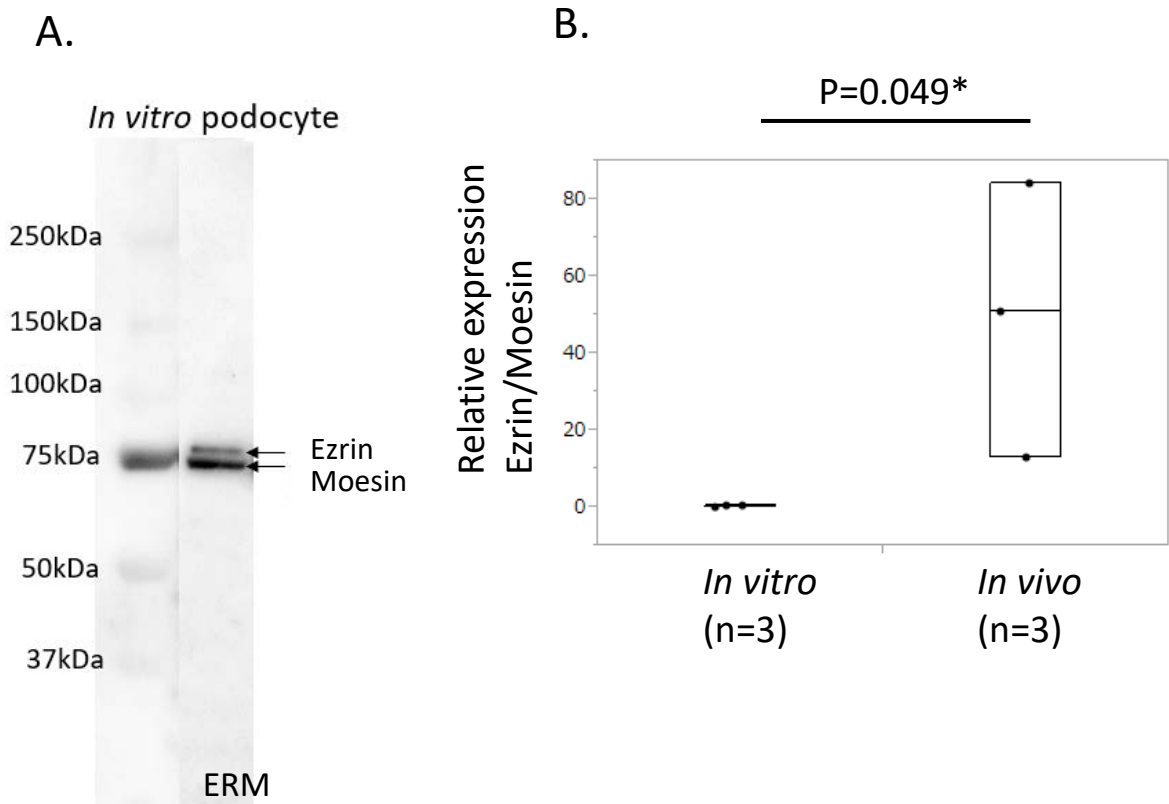
D.



Supplementary Figure 1. Validation of recombinant CLEC-2 proteins

- A) SDS-PAGE and Coomassie Brilliant Blue (CBB) stain of recombinant proteins. The bands were detected as expected molecular size. Fc: 30kDa, Fc-CLEC-2: 60kDa, FLAG-CLEC-2: around 30-35kDa.
- B) Deglycosylation assay of FLAG-CLEC-2 proteins. The deglycosylation by PNGase F changed the double bands (30/35 kDa) to a single band (26 kDa).
- C) Pull-down assay. Fc-CLEC-2 and FLAG-CLEC-2 were incubated with podocyte lysate, then precipitated and assayed for PDPN by Western blot analysis. These data confirm that mouse podoplanin (PDPN) can bind Fc-CLEC-2 and FLAG-CLEC-2.
- D) Blue Native PAGE of the recombinant proteins. Fc and Fc-CLEC-2 exist as tetramers (120kDa and 240kDa, respectively), and FLAG-CLEC-2 exists as a monomer (35kDa) in aqueous solution.

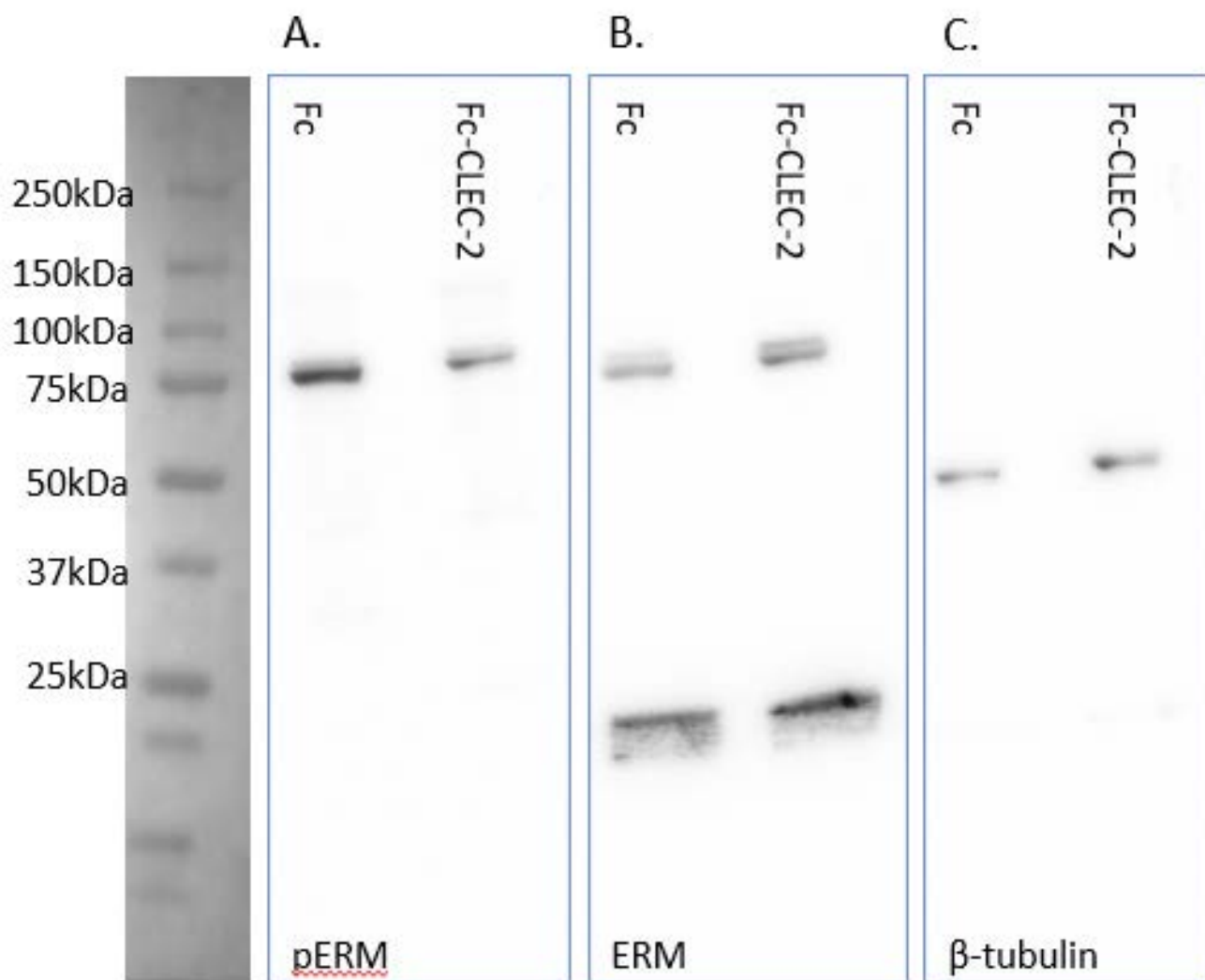
Supplementary Figure.2



Supplementary Figure 2. ERM expression in cultured podocytes.

- A) Western blot of lysate of cultured podocytes. Cultured podocytes contained more moesin (lower band, 75kDa) than ezrin (upper band, 81kDa).
- B) The relative mRNA expression of ezrin and moesin by quantitative PCR. Ezrin/Moesin ratio was 0.47(0.18-0.50) in cultured podocytes, while it was 51(13-84) in *in vivo* podocytes.

Supplementary Figure.3

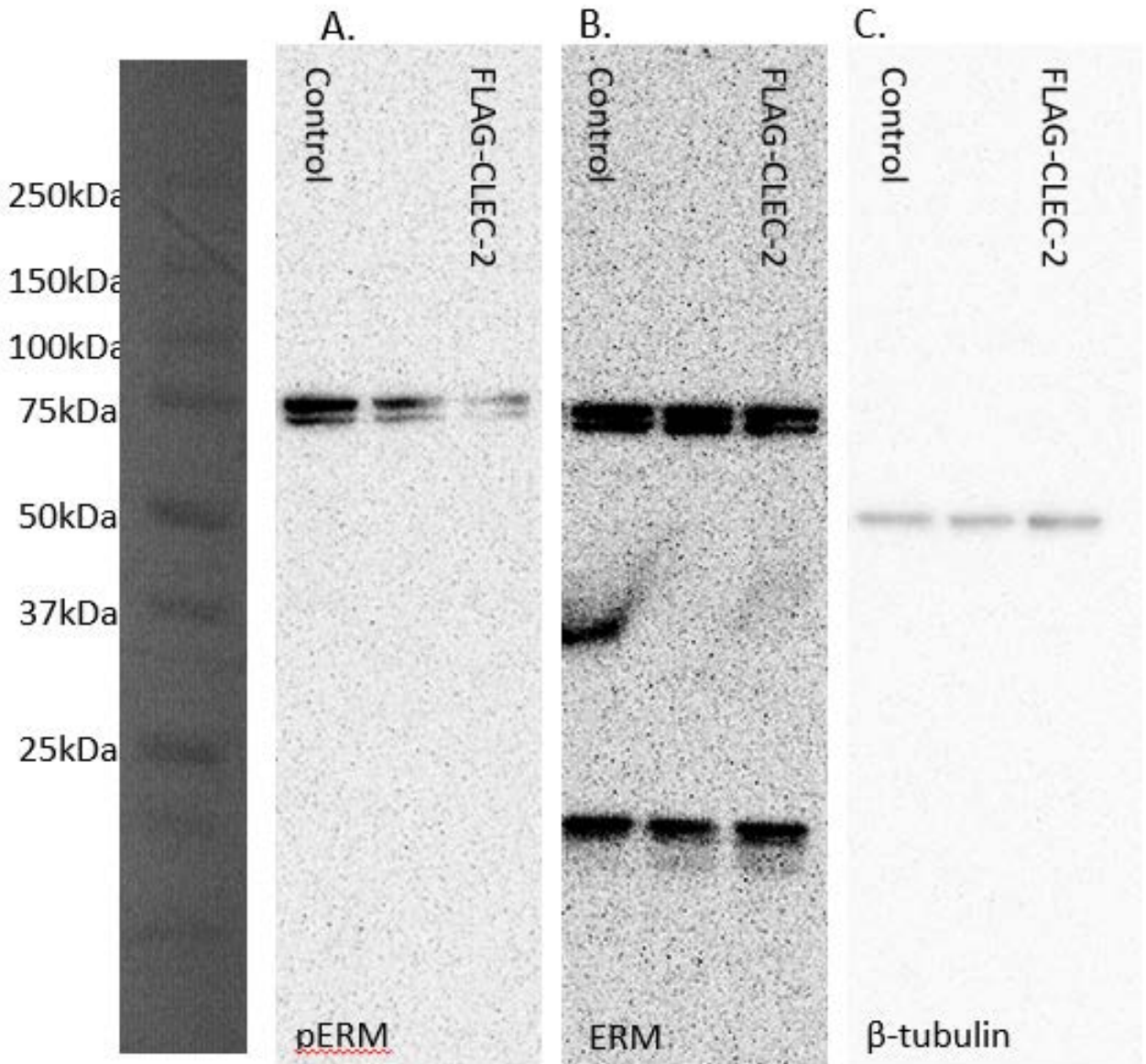


Supplementary Figure 3. Western blot analysis for ERM after treatment of Fc or Fc-CLEC-2 at 37°C for 1 hour.

- A) The membrane was incubated with anti-pERM antibody
- B) The same membrane was stripped off and incubated with anti-ERM antibody.
- C) The same membrane was again stripped off and incubated with anti- β -tubulin antibody.

ERM proteins were dephosphorylated by Fc-CLEC-2, compared to Fc control.
Ezrin: 81kDa, Moesin: 75kDa, β -tubulin 55kDa.

Supplementary Figure.4



Supplementary Figure 4. Western blot analysis of glomerular lysate for ERM.

- A) The membrane was incubated with anti-pERM antibody
- B) The same membrane was stripped off and incubated with anti-ERM antibody.
- C) The same membrane was again stripped off and incubated with anti-β-tubulin antibody.

Ezrin (upper band) was dephosphorylated by FLAG-CLEC-2.

Ezrin: 81kDa, Moesin: 75kDa, β-tubulin 55kDa.