

## **Supplementary Material**

# **De Novo Cloning and Functional Characterization of a Mechanosensitive Piezo-Like Ion Channel in the Crayfish**

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Figure S1. Three dimensional structure of the cloned channel monomer by fusing the two I-TASSER outputs in VMD platform over the beam strand. A and B are lateral and the top view of the structure, respectively. C, is the structure of the trimeric pore module and the pore calculated in Alphafold Colab platform.

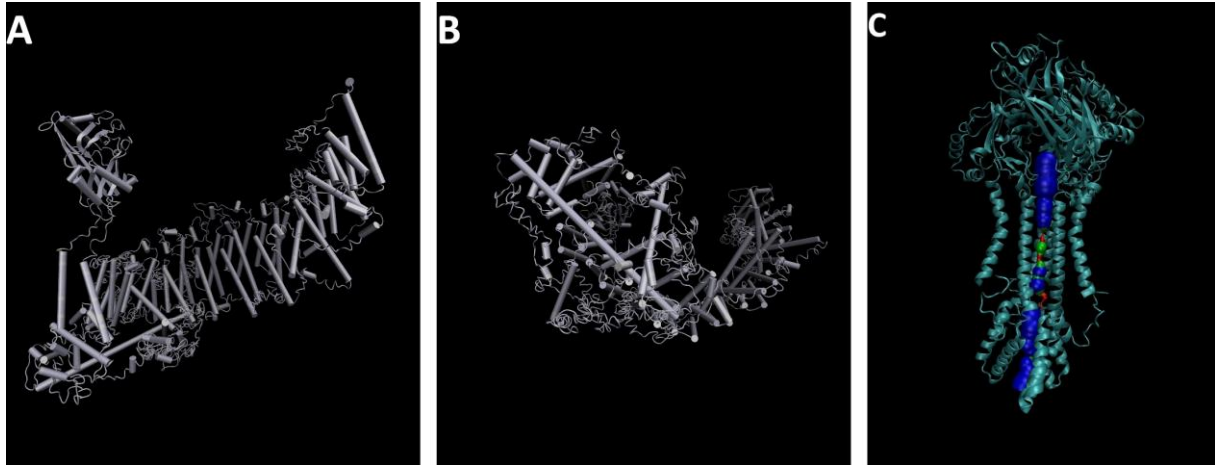


Figure S2. Immunofluorescence labeling of the HEK293T cells expressing mPiezo1-IRES-eGFP plasmid. Cells were transfected by the plasmid and fixed in 20 % PFA in PBS (A). Primarily labeled by anti-mouse piezo-1 channel polyclonal rabbit antibody and secondarily labeled by fluorescent anti rabbit - goat 594 antibody (B). Image of the area in transmitted light detection mode (C). D is the superimposed picture of A, B and C.

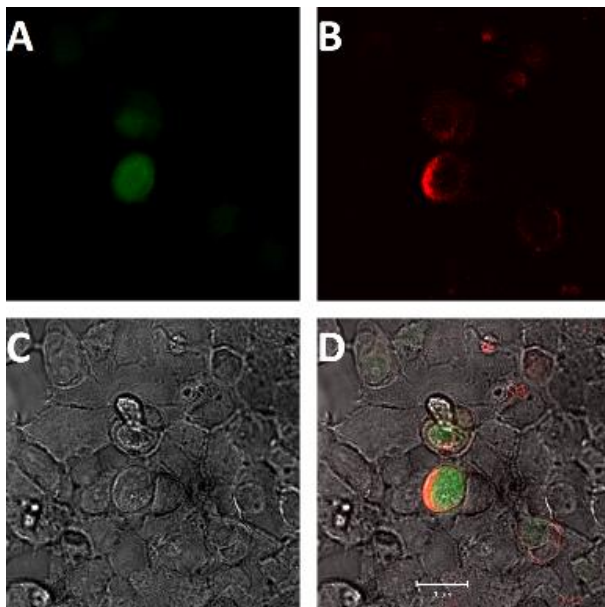


Table S1. Nucleotide sequence of the cloned mRNA. Start and stop codons are highlighted.

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