

1 **Supplemental figure 1. The mRNA level of crucial receptors of FGF21**

2 Level of mRNA expression of *FGFR1*(A), *FGFR2* (B), *FGFR3* (C), *FGFR4* (D), and  $\beta$ -  
3 *KLOTHO* (E) in human (h) VEGF-treated primary human retinal microvascular  
4 endothelial cells (HRMECs).

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6 **Supplemental figure 2. FGF21 preserves *CLDN-1* mRNA expression in HRMEC**

7 qRT-PCR analysis of effect of FGF21 on *CLDN1* (A), *CLDN5* (B), *VE-CADHERIN* (C),  
8 and *OCN* (D) in the HRMECs. Samples were collected 6 hours after hVEGF  
9 induction. n.s., not significant. Fold change was calculated (n = 6, \*  $p < 0.05$ ).

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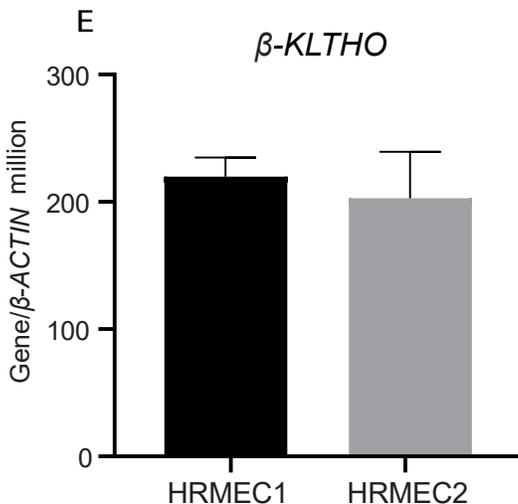
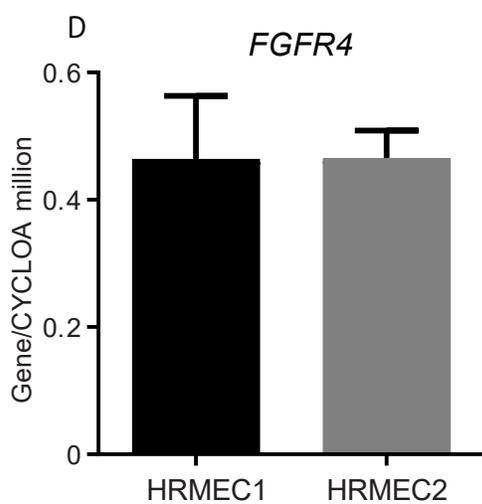
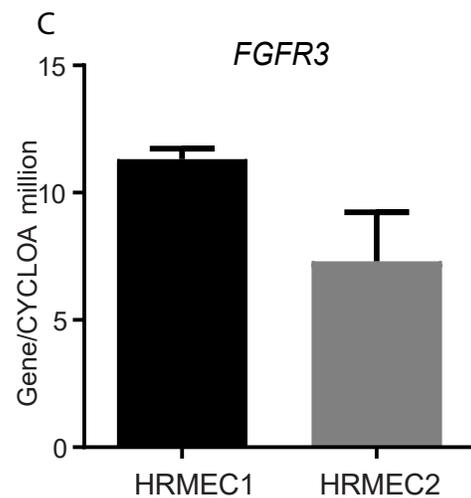
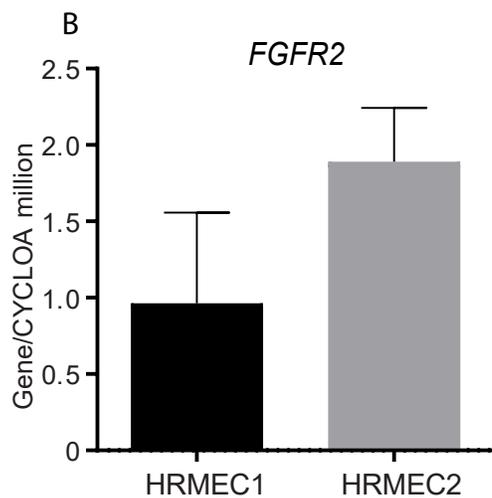
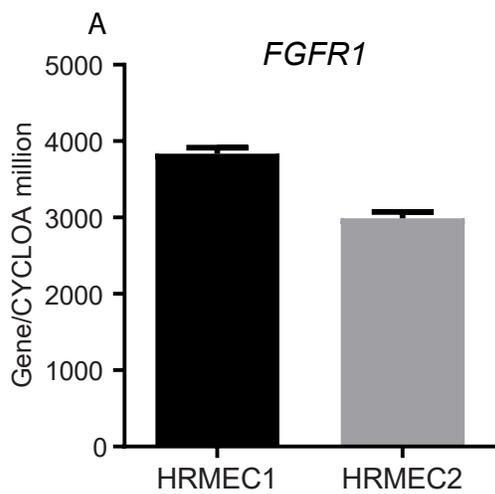
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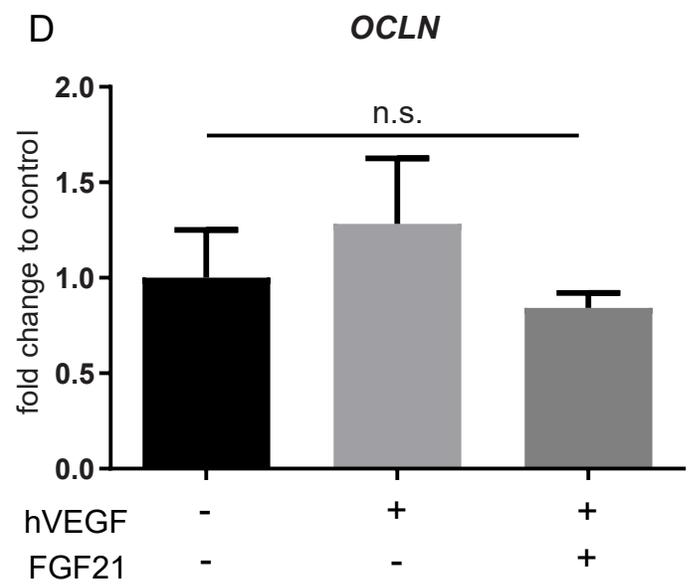
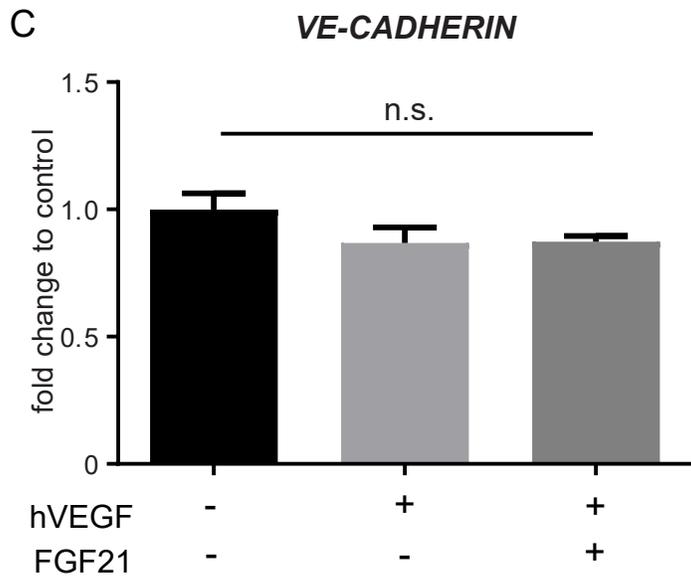
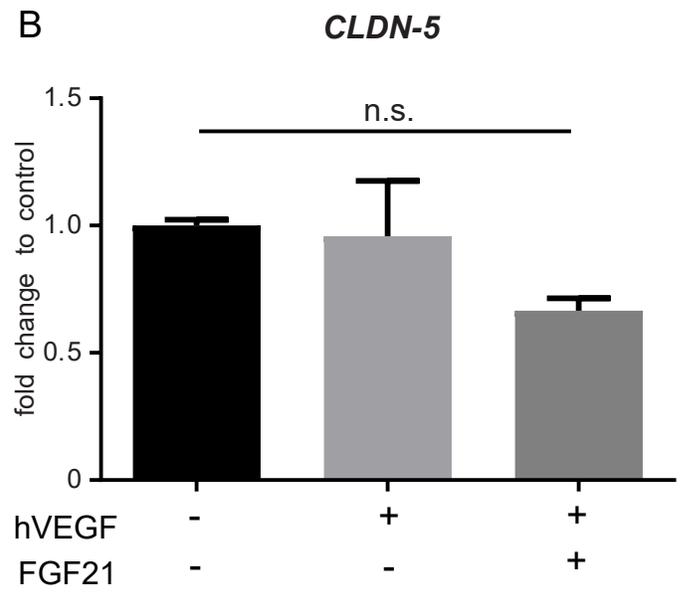
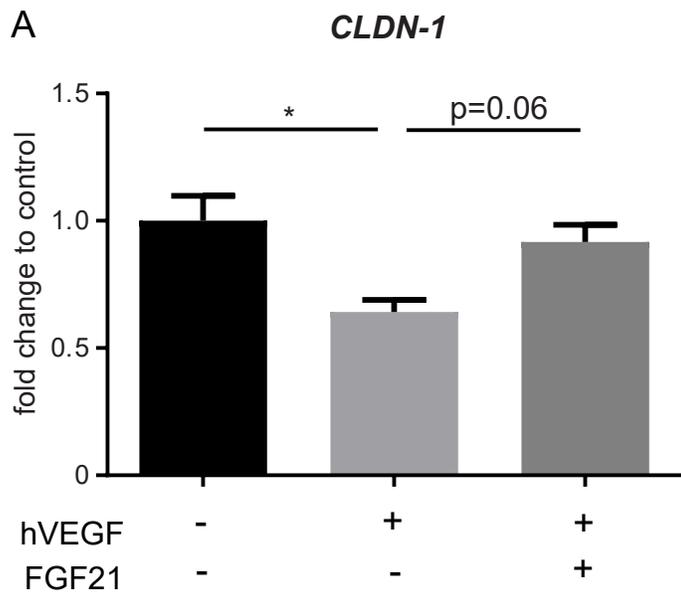
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22 **Supplemental table 1.**23 **Primers list for RT-PCR**

| <i>Gene</i>          | Primers                          |
|----------------------|----------------------------------|
| <i>18S-F</i>         | 5'-ACGGAAGGGCACCACCAGGA -3'      |
| <i>18S-R</i>         | 5'- CACCACCACCCACGGAATCG-3'      |
| <i>CLDN-1-F</i>      | 5'- GCATGAAGTGTATGAAGTGCTTGGA-3' |
| <i>CLDN -1-R</i>     | 5'- CGATTCTATTGCCATACCATGCTG-3'  |
| <i>CLDN -5-F</i>     | 5'- CTCTGCTGGTTCGCCAACA-3'       |
| <i>CLDN -5-R</i>     | 5'- CCCAGCTCGTACTTCTGTGACA-3'    |
| <i>VE-CADHERIN-F</i> | 5'- TTGGAACCAGATGCACATTGAT-3'    |
| <i>VE-CADHERIN-R</i> | 5'- TCTTGCGACTCACGCTTGAC -3'     |
| <i>OCLN-F</i>        | 5'- ACAAGCGGTTTTATCCAGAGTC-3'    |
| <i>OCLN-R</i>        | 5'- GTCATCCACAGGCGAAGTTAAT-3'    |
| <i>FGFR1-F</i>       | 5'- CCCGTAGCTCCATATTGGACA-3'     |
| <i>FGFR1-R</i>       | 5'- TTTGCCATTTTTCAACCAGCG-3'     |
| <i>FGFR2-F</i>       | 5'- AGCACCATACTGGACCAACAC-3'     |
| <i>FGFR2-R</i>       | 5'- GGCAGCGAACTTGACAGTG-3'       |
| <i>FGFR3-F</i>       | 5'- CCCAAATGGGAGCTGTCTCG-3'      |
| <i>FGFR3-R</i>       | 5'- CCCGGTCCTTGTC AATGCC-3'      |
| <i>FGFR4-F</i>       | 5'- CCATAGGGACCCCTCGAATAG-3'     |
| <i>FGFR4-R</i>       | 5'- CAGCGGAACTTGACGGTGT-3'       |

|                        |                               |
|------------------------|-------------------------------|
| <i>β-KLOTHO-F</i>      | 5'- TTCTGGGGTATTGGGACTGGA-3'  |
| <i>β-KLOTHO-R</i>      | 5'- CCATTCGTGCTGCTGACATTTT-3' |
| <i>CYCLOPHILIN-A-F</i> | 5'-CCCACCGTGTTCTTCGACATT-3'   |
| <i>CYCLOPHILIN-A-R</i> | 5'-GGACCCGTATGCTTTAGGATGA-3'  |
| <i>β-ACTIN-F</i>       | 5'- AGAGCTACGAGCTGCCTGAC-3'   |
| <i>β-ACTIN-R</i>       | 5'- AGCACTGTGTTGGCGTACAG-3'   |

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