

Supplementary information

# Adhesion G Protein-Coupled Receptor *Gpr126* (*Adgrg6*) Expression Profiling in Diseased Mouse, Rat, and Human Kidneys

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**Citation:** Kösters, P.; Cazorla-Vázquez, S.; Krüger, R.; Daniel, C.; Vonbrunn, E.; Amann, K.; Engel, F.B. Adhesion G Protein-Coupled Receptor *Gpr126* (*Adgrg6*) Expression Profiling in Diseased Mouse, Rat, and Human Kidneys. *Cells* **2024**, *13*, 874. <https://doi.org/10.3390/cells13100874>

Academic Editor: Jonathon Willets

Received: 10 April 2024

Revised: 10 May 2024

Accepted: 15 May 2024

Published: 18 May 2024



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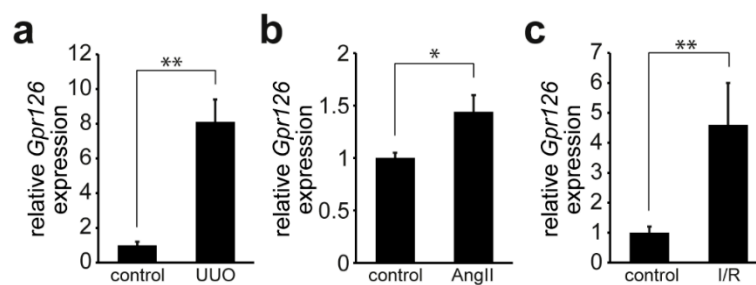
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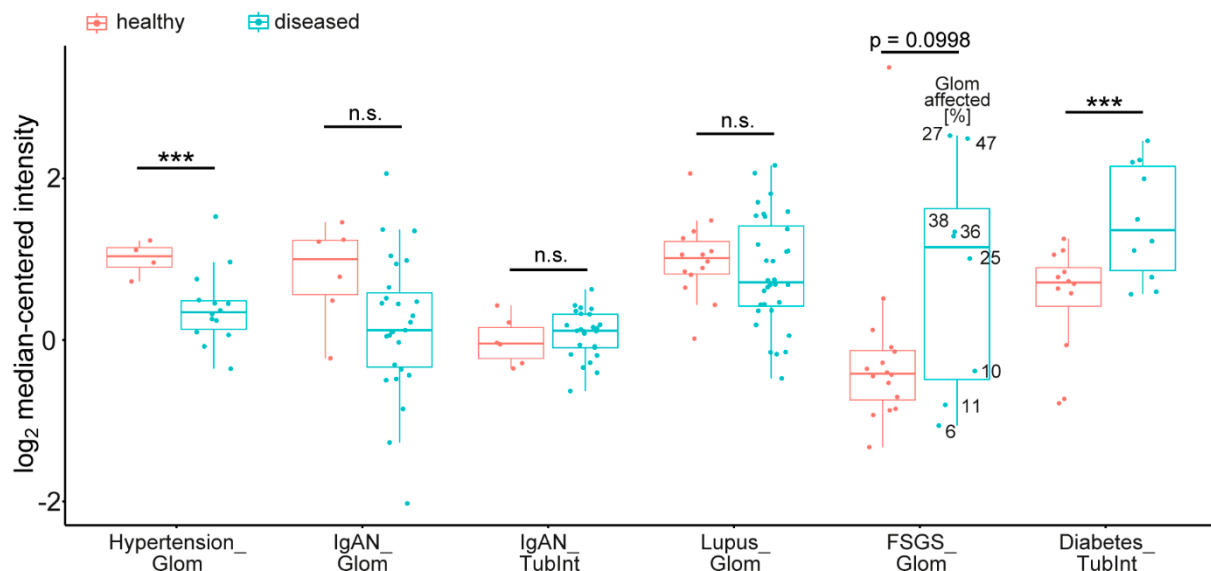
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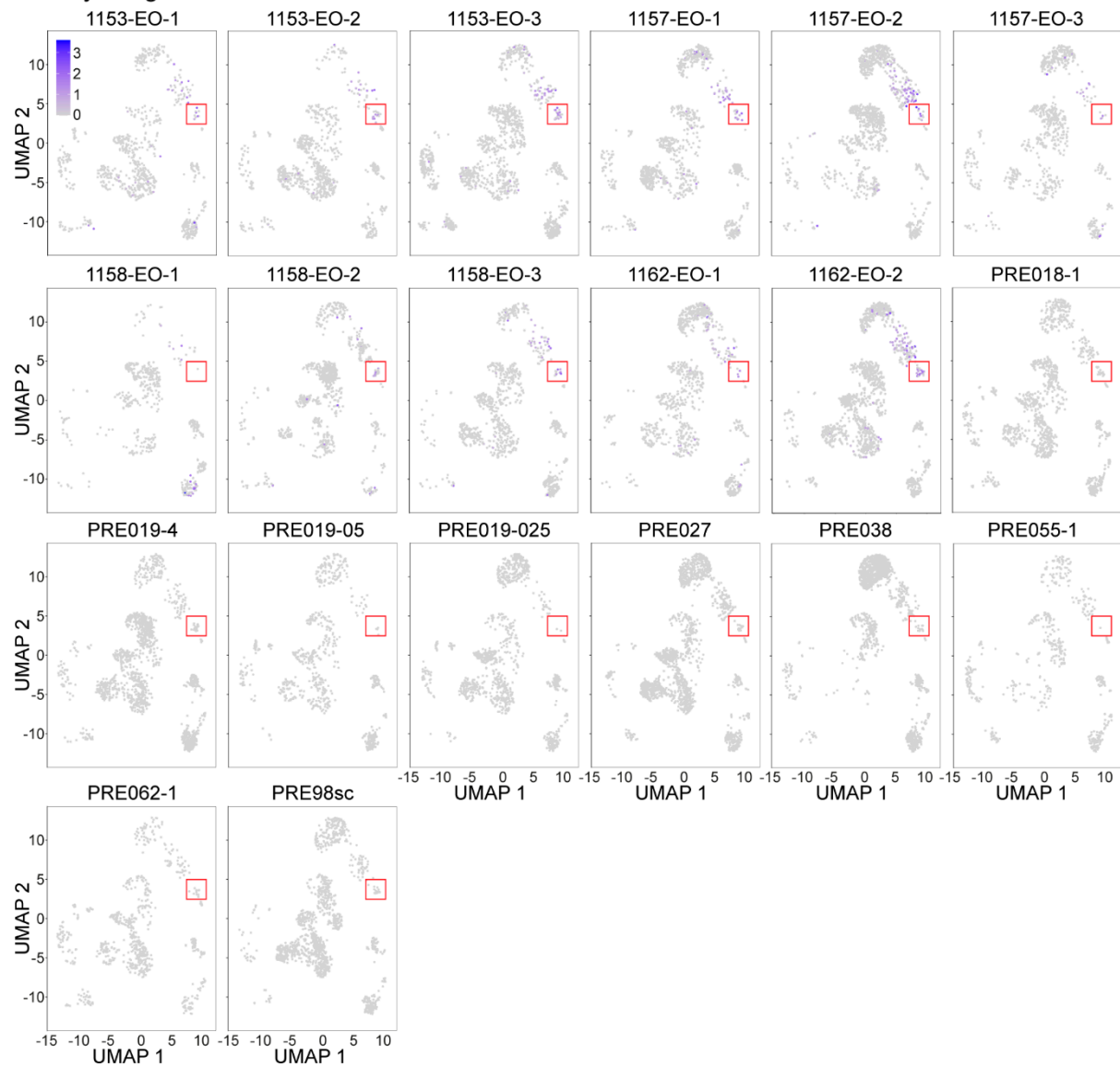


**Figure S1.** *Gpr126* expression in rodent models of kidney disease. Quantitative RT-PCR analysis on rodent metanephroi in three different models of disease. Graph bars and error bars represent the means  $\pm$  SD of *Gpr126* relative to *Gapdh* mRNA expression. Statistical analysis was performed using an unpaired t-test. \*:  $p < 0.05$ , \*\*:  $p < 0.01$  (a) Mouse model of unilateral ureteral obstruction (UUO);  $n = 5$  (control) and 6 (model) independent experiments. (b) Mouse model of angiotensin II perfusion (AngII);  $n = 4$  (control) and 6 (model) independent experiments. (c) Rat model of ischemia-reperfusion injury (I/R);  $n = 6$  independent experiments.

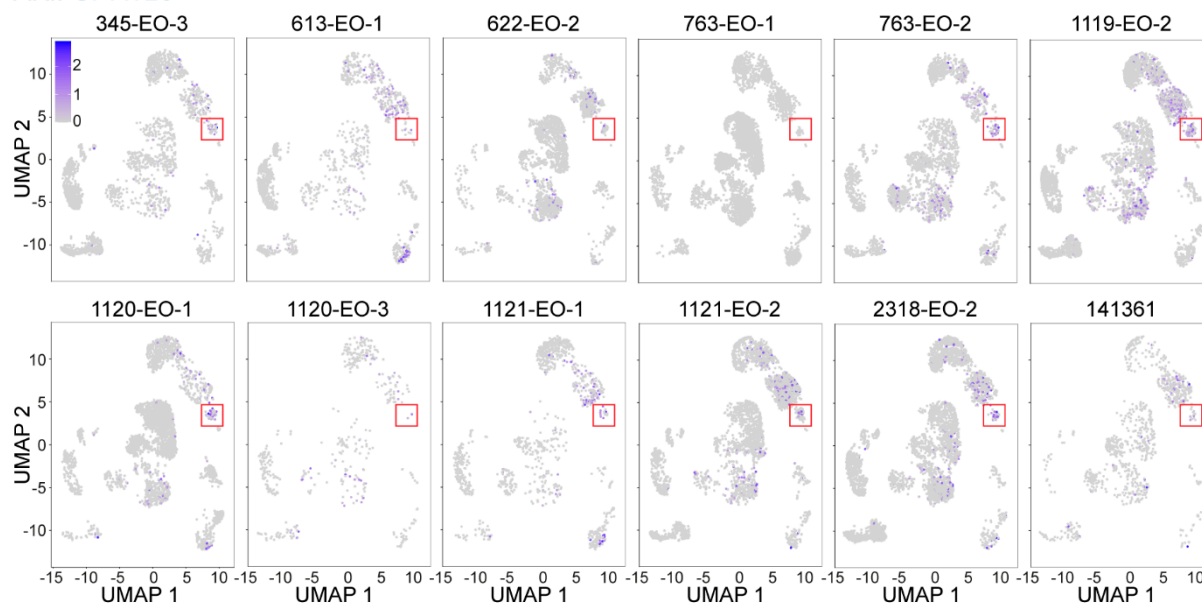


**Figure S2.** Analysis of changes in *Gpr126* expression in human kidney disease based on the NephroSeq data. To compare *Gpr126* expression in healthy living donors to that in individuals with kidney disease, we conducted a statistical analysis using a two-sided t-test via `rstatix` and visualized log<sub>2</sub> median-centered intensity with `ggpubr` <https://cran.r-project.org/web/packages/ggpubr/index.html>. Lupus\_Glom (Lupus nephritis; glomeruli; control:  $n = 14$ ; diseases:  $n = 32$ ), IgAN\_TubInt (IgA nephropathy; tubulointerstitium; control:  $n = 6$ ; diseases:  $n = 25$ ), IgAN\_Glom (IgA nephropathy; glomeruli; control:  $n = 6$ ; diseases:  $n = 27$ ), FSGS\_Glom (FSGS, glomeruli; control:  $n = 16$ ; diseases:  $n = 8$ ), Hypertension\_Glom (hypertension; glomeruli; control:  $n = 4$ ; diseases:  $n = 14$ ), and Diabetes\_TubInt (diabetes; tubulointerstitium; control:  $n = 10$ ; diseases:  $n = 12$ ). \*\*\*:  $p < 0.005$ . n.s.: not significant.

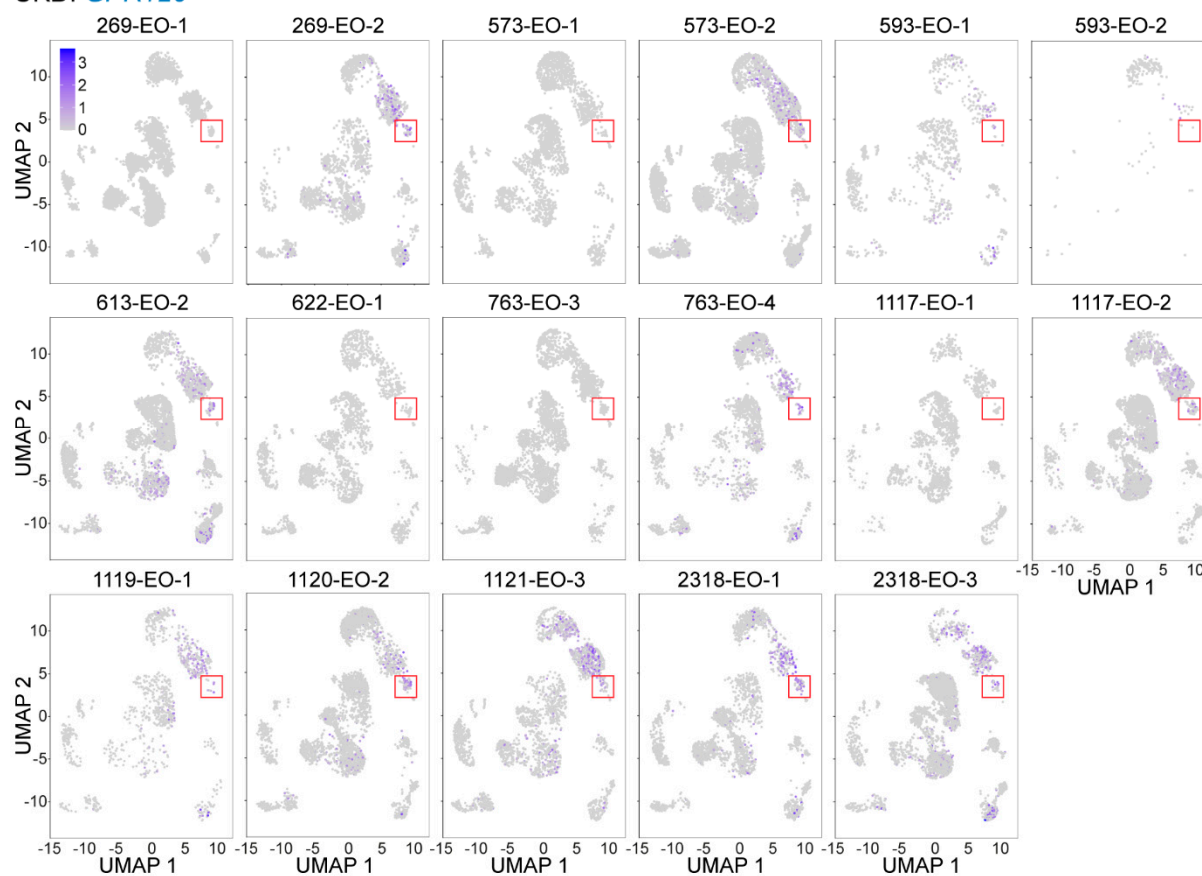
Healthy living donors: *GPR126*



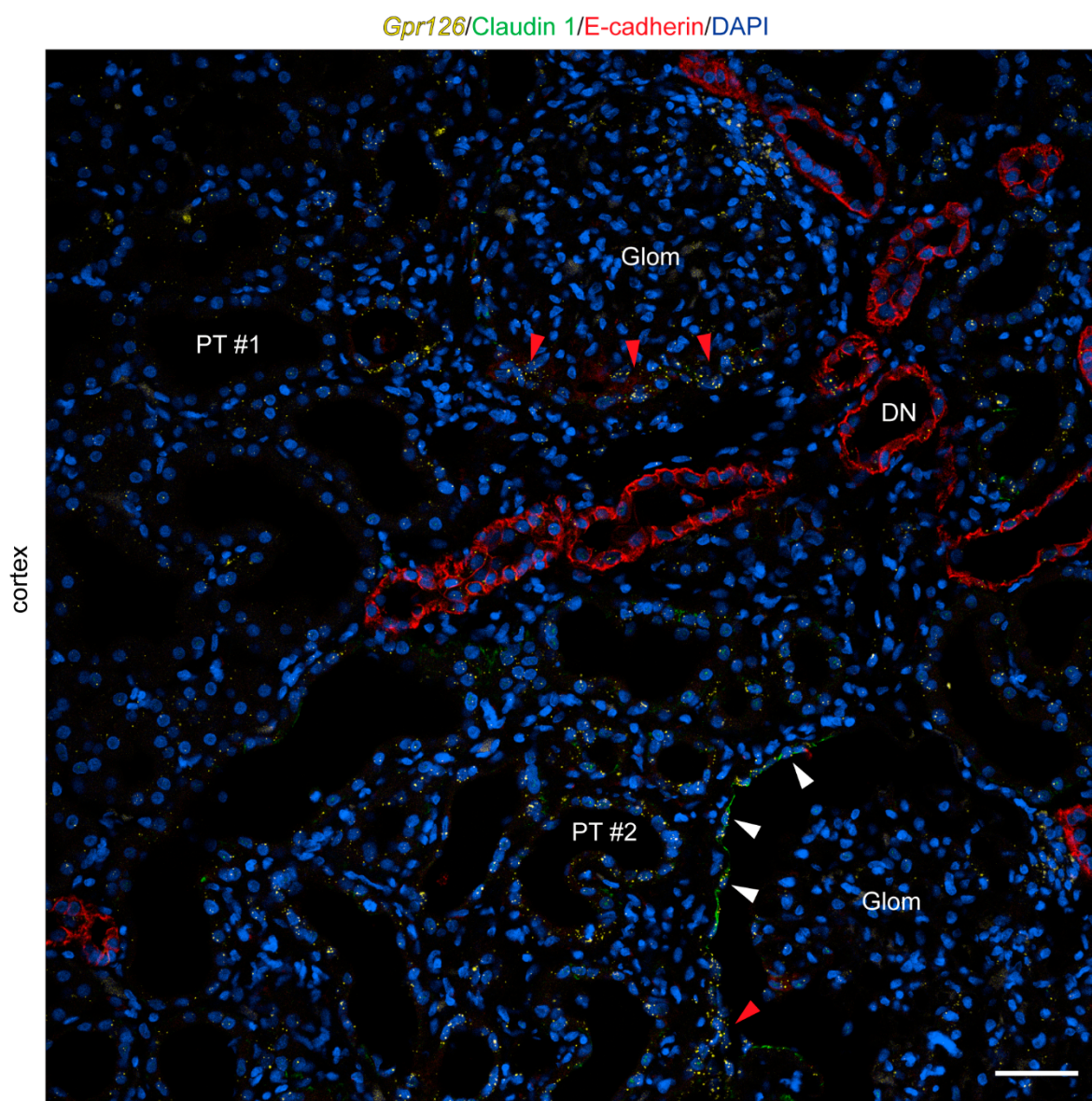
**Figure S3.** Individual UMAP plots of *GPR126* expression for each of the 20 healthy living donors (control).

AKI: *GPR126*

**Figure S4.** Individual UMAP plots of *GPR126* expression for each of the 12 AKI patients.

CKD: *GPR126*

**Figure S5.** Individual UMAP plots of *GPR126* expression for each of the 17 CKD patients.



**Figure S6.** Overview RNAscope® in situ hybridization image of kidney cortex from FSGS patient biopsy. Proximal tubules (PT, Claudin 1-negative, E-cadherin-negative) show different levels of GPR126 expression (yellow dots; PT #1: low expression; PT #2: high expression). Parietal epithelial cells (PECs) inside FSGS lesions (red arrowheads, Claudin 1-negative) show increased expression of GPR126 compared to PECs outside FSGS lesions (white arrowheads, Claudin 1-positive). There is no increase of GPR126 expression in the distal nephron segments (DN, E-cadherin-positive). Scale bar: 50  $\mu$ m.

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