

SUPPLEMENTARY DATA

S1

Primer sequences for RT-PCR (mouse)

Target Gene	Primer Sequence
NLRP3 F	ATTACCCGCCCGAGAAAGG
NLRP3 R	CATGAGTGTGGCTAGATCCAAG
Caspase-1 F	ACAAGGCACGGGACCTATG
Caspase-1 R	TCCCAGTCAGTCCTGGAAATG
ASC F	ACAGGCTGTGATACGACTAAAGA
ASC R	CATTTGCCGTTTCGGTGGA
IL-1 β F	GAAATGCCACCTTTTGACAGTG
IL-1 β R	TGGATGCTCTCATCAGGACAG
V2R F	GCTGTGGCTCTGTTTCAAGTG
V2R R	CCAGGATCATGTAGGAAGAGGC
AQP2 F	GGACCTGGCTGTCAATGCTC
AQP2 R	GCGGGCTGGATTCATGGAG

Primer sequences for RT-PCR (Rat)

Target Gene	Primer Sequence
AQP2 F	TGACCTCAACTACATGGTCTACA
AQP2 R	GCGGGCTGGATTCATGGAG
AQP3 F	AGCAGATCTGAGTGGGCAGT
AQP3 R	CTTGGGCTTAAGAGGGGAAC
NKCC2 F	CGGGTCGTCTAGATCCAAAA
NKCC2 R	ATGGA CT TGGAAACGACTGG
NLRP3 F	CGAGACCTCTGGGAAAAAGCT
NLRP3 R	GCATACCATAGAGGAATGTGATGTACA
Caspase-1 F	GATGGCACATTTCCAGGACTGA
Caspase-1 R	TGTTGCAGATAATGAGGGCAAGAC
ASC F	ACTTCTGTGACCCTGGCAATGAG
ASC R	GCTGAGCAGCTGCAAACGAC
IL-1 β F	GAAATGCCACCTTTTGACAGTG
IL-1 β R	TGGATGCTCTCATCAGGACAG

S2A**Diagnosis of patients with kidney diseases in Figure1**

Diagnosis	Case Number
IgA nephropathy	2006, 2007, 2018, 2027, 2035, 2036
Nephrotic syndrome	2013, 2016, 2028, 2029, 2037, 2039
Interstitial nephritis	2024
ANCA related vasculitis/CKD stage 5	2008
Lupus nephritis	2025
Chronic glomerulonephritis	2043
Henoch-Schonlein purpura	2011

Supplementary data figure legends:

S2B Figure. Co-localization of AQP2 and ASC in Figure 1D was analyzed by calculation of the Pearson's coefficient.

S3 Figure. Genotyping of *nlrp3*^{+/+} and *nlrp3*^{-/-} mice

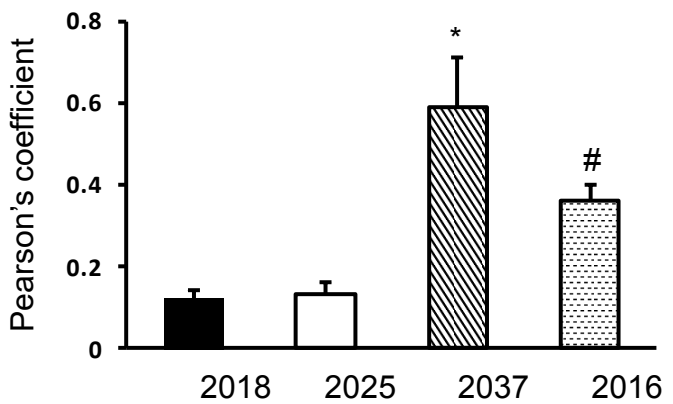
S4 Figure. Increased body size and abdominal fat in *nlrp3*^{+/+} mice compared to *nlrp3*^{-/-} mice with HFD for 12 weeks.

S5 Figure. Quantitative analysis of immunofluorescence intensity of AQP2 and ASC in Figure 5C.

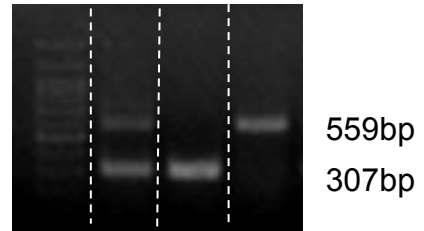
S6 Figure. (A) Protein expression of AQP2 in cholesterol-treated primary IMCD suspensions with or without dDAVP 10⁻⁷ M treatment. (B) Protein expression of AQP2 in primary IMCD suspensions with or without ATO treatment.

S7 Figure. (A) and (B) Protein expression of SQSTM1 and LC3B in

cholesterol-treated primary IMCD suspensions with or without ATO treatment.



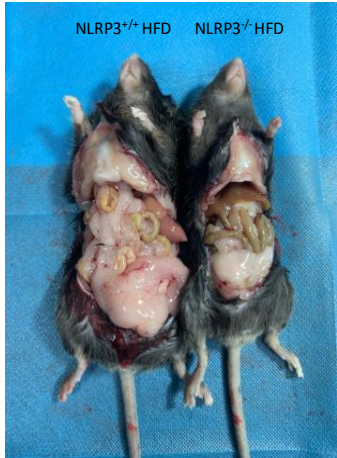
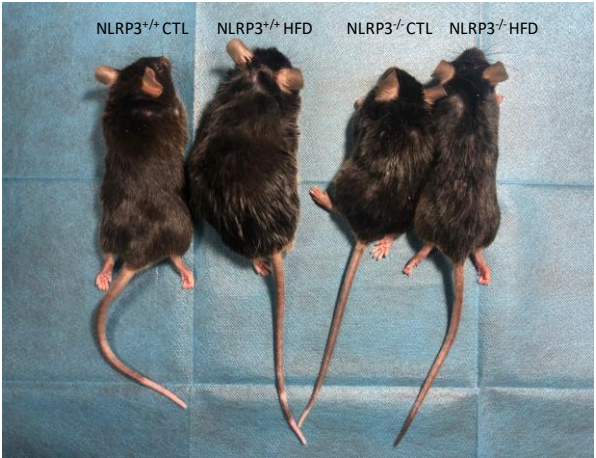
A

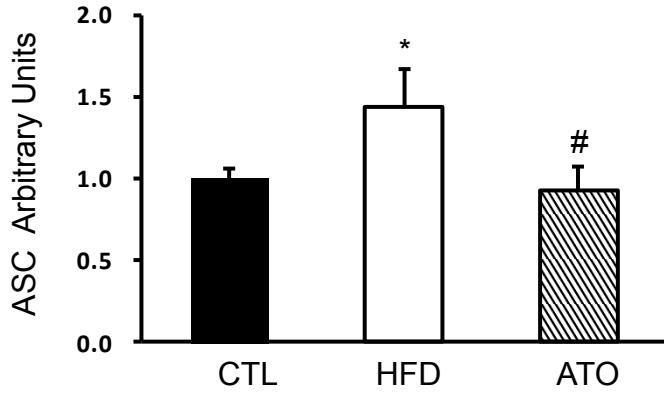
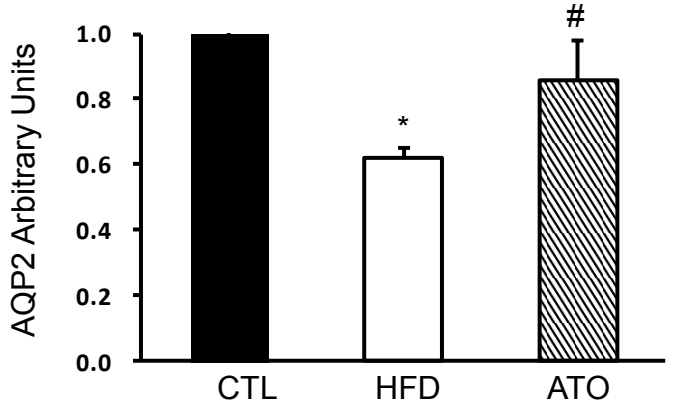


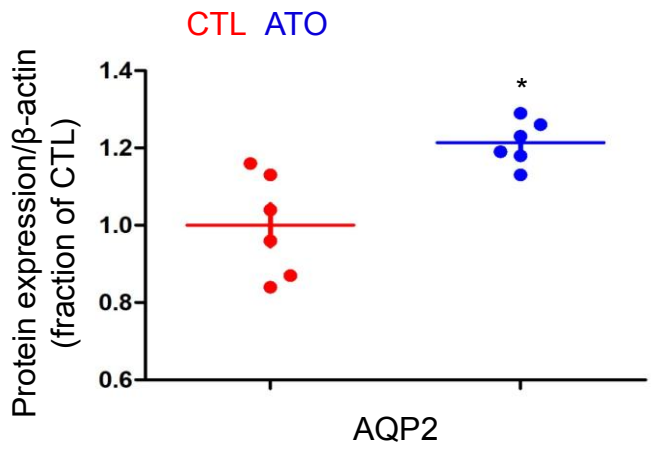
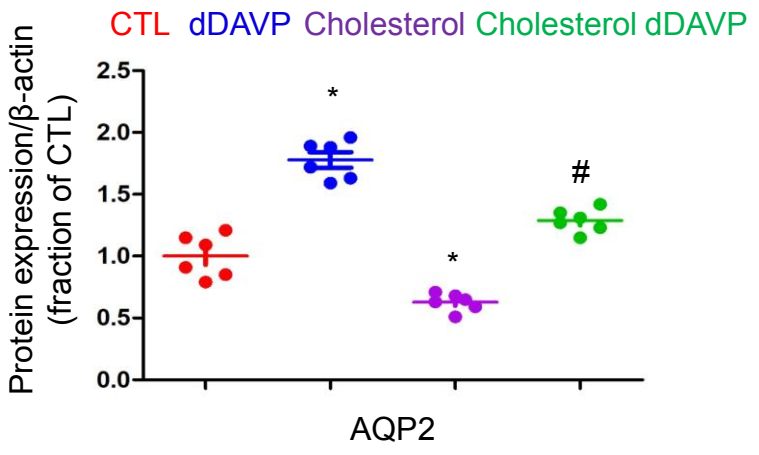
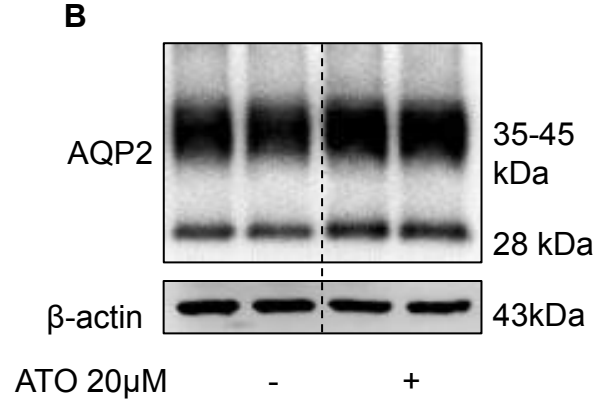
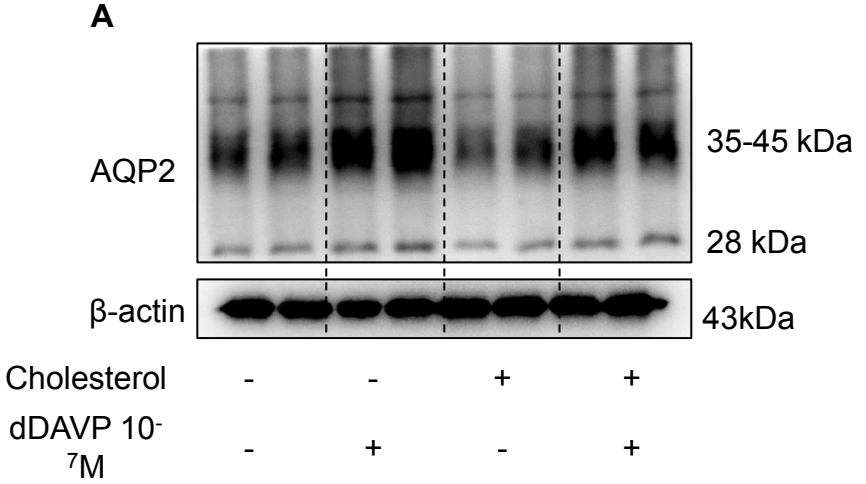
Marker +/- -/- +/+

559bp
307bp

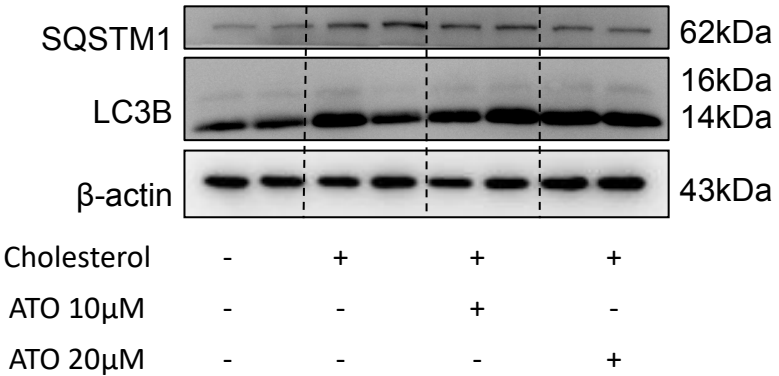
Supplementary data: S4







A



B

