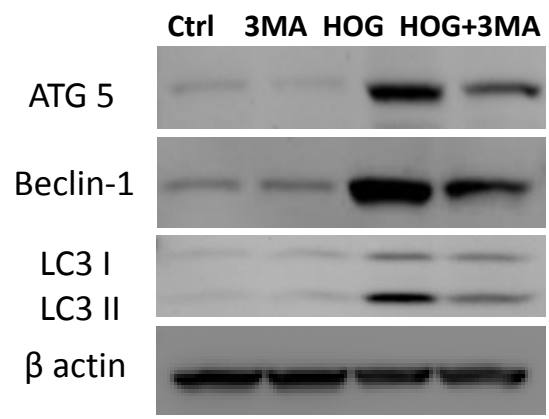


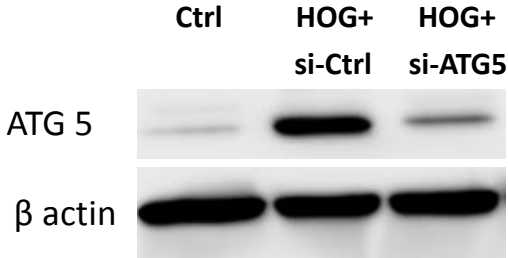
Supplemental Figure S1.



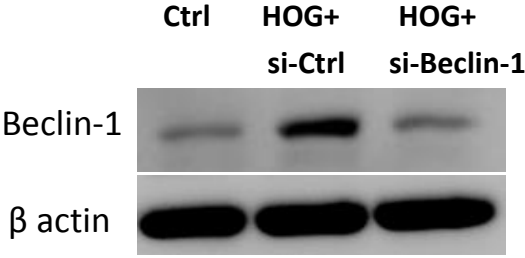
Effects of 3MA on HOG-LDL-induced Müller cell autophagy. Cells were pre-treated with 3MA (5mM) for 1h before treatment with HOG-LDL (200mg/L) for 24h.

Supplemental Figure S2.

A



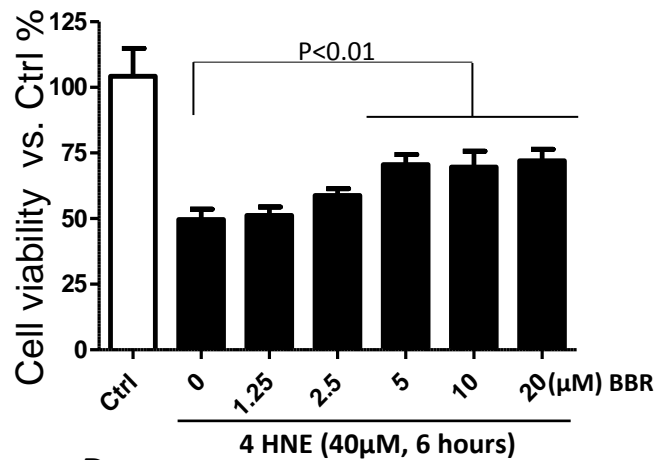
B



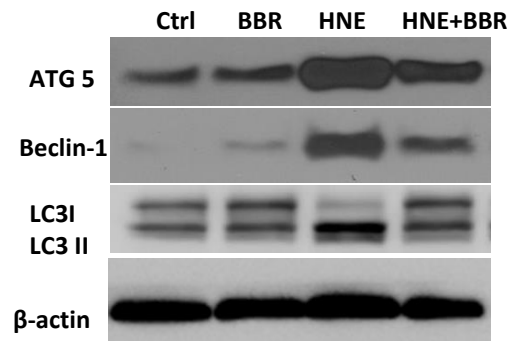
Efficacy of si-ATG5 (A) and siBeclin-1 (B). Cells were transfected with siRNA 36h prior to treatment with HOG-LDL for 24h.

Supplemental Figure S3.

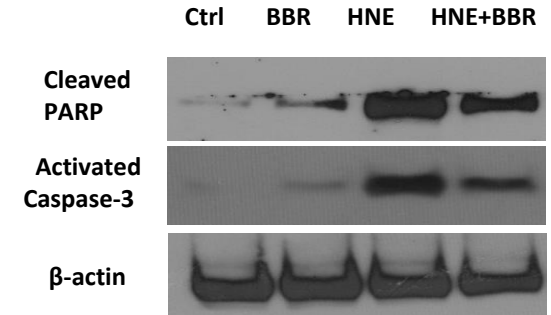
A



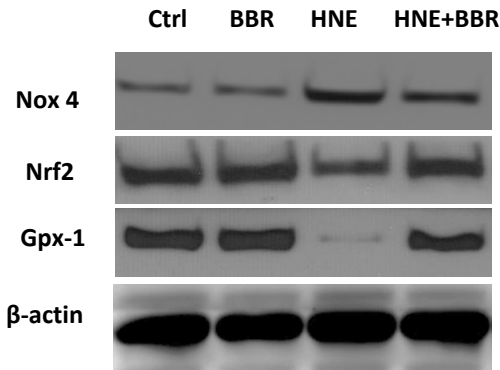
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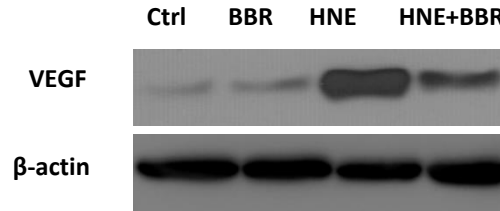
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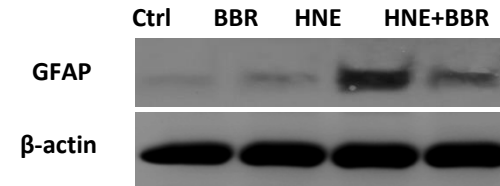
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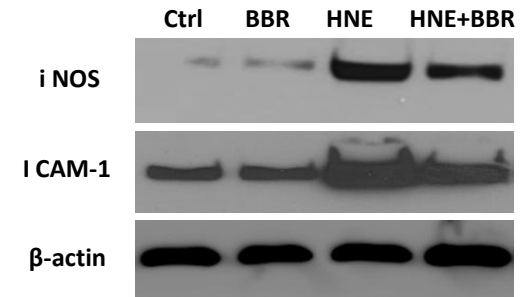
E



F



G



The protective role of berberine on 4-HNE-induced Müller cell death and dysfunction.

Müller cells were treated by 4-HNE (40 μM) for 6h, with/without berberine (5 μM, or as indicated in the Figure) pre-treatment for 1h. **(A)** Cell viability expressed as percentage vs. no treatment control (mean ± SD; n=3). **(B)** ATG-5, Beclin-1 and LC3 II. **(C)** Cleaved PARP and active caspase-3. **(D)** Nox4, Nrf2 and Gpx-1. **(E)** VEGF. **(F)** GFAP. **(G)** iNOS and ICAM-1. All were detected by Western blot, and all experiments were repeated x3.