Netrin-1 promotes diabetic corneal wound healing through molecular mechanisms mediated via the adenosine 2B receptor

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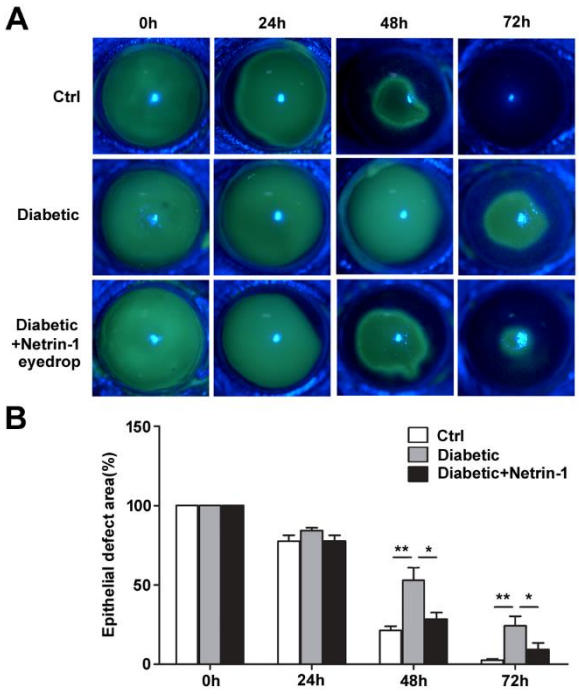

Figure S1. Netrin-1 promotes corneal epithelial wound healing in normal mice. Corneal epithelium was scraped in control mice with subconjunctival injection of equal PBS as vehicle control or netrin-1 (50 ng per eye). The corneal epithelial wound defect was stained with fluorescein sodium at 24, 48, and 72 h after epithelial scrape (A, 8 mice per group). The histogram of residual epithelial defect is presented as the percentage of the original wound area (B). *$p<0.05$.

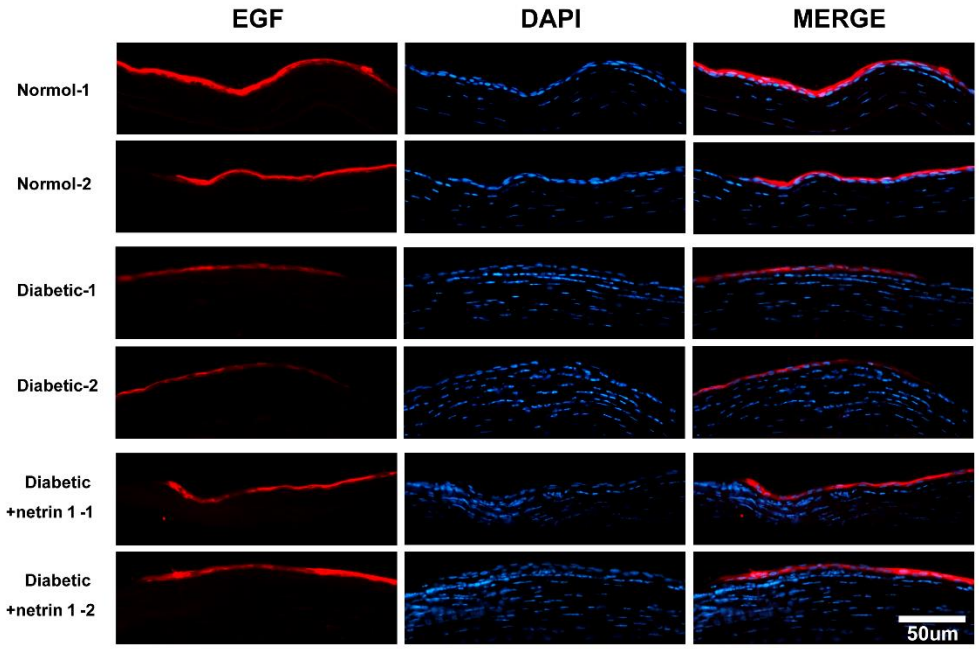

Figure S2. Netrin-1 upregulates corneal EGF expression in diabetic mice. The immunofluorescence staining results showed that the expression of EGF were decreased in diabetic mice compared to the normal mice at 48-hour post-wounded. The treatment of netrin-1 upregulated the EGF expression in diabetic mice. (3 mice per group)

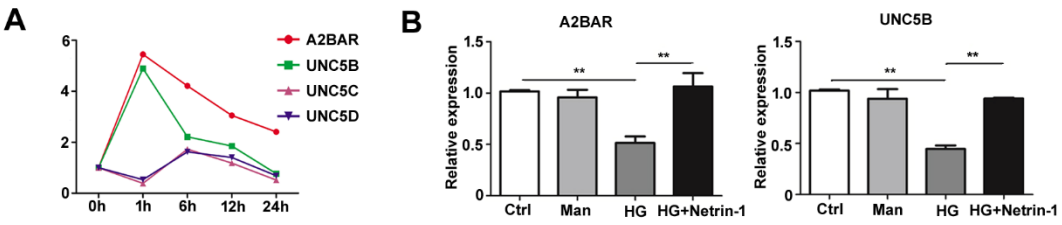

Figure S3. Netrin-1 upregulates A2BAR and UNC5B expression in high glucose-treated corneal epithelial cells. The mRNA expression of A2BAR and UNC5B were significantly up-regulated after the mouse corneal epithelial cells were wounded in normal conditions (A). Netrin-1 up-regulated the expression levels of these two receptors when compared to the high glucose-treated corneal epithelial cells and recovered the same levels as that of control or mannose osmotic control cells (B), *$p<0.05$, **$p<0.01$.