

Supplemental material

Effects of linagliptin on human immortalized podocytes: a cellular system to study dipeptidyl-peptidase 4 inhibition

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Running title:

DPP4 and podocyte behaviour

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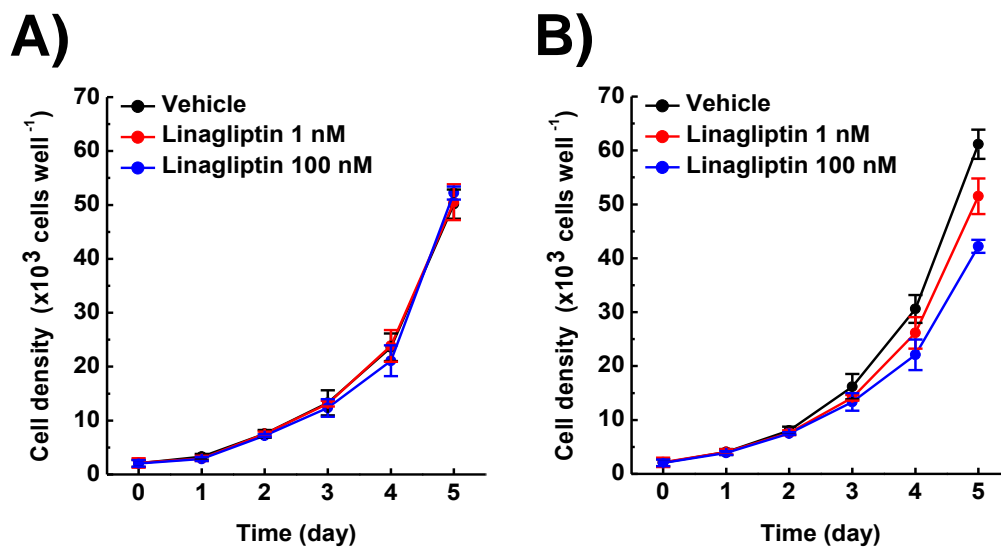
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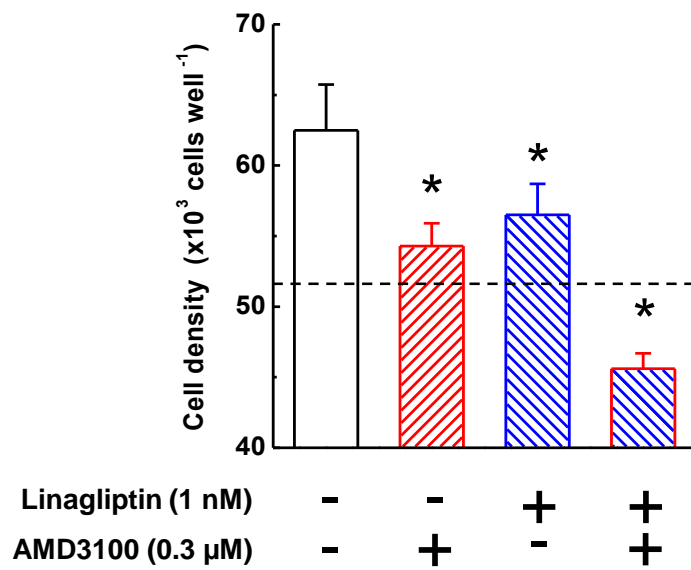
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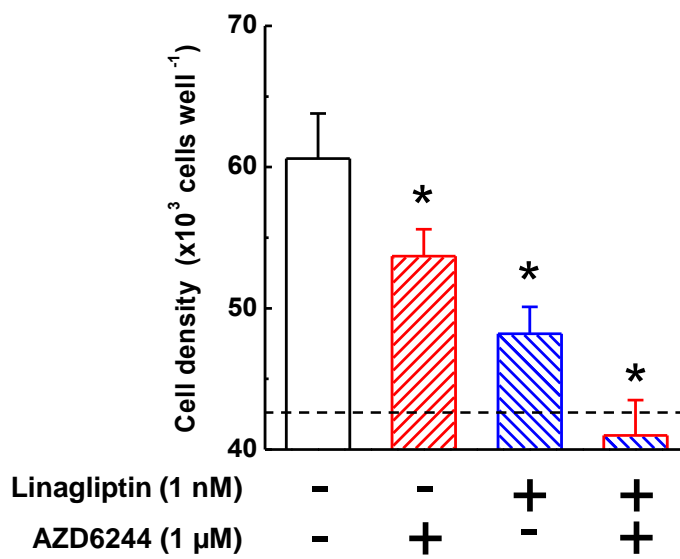
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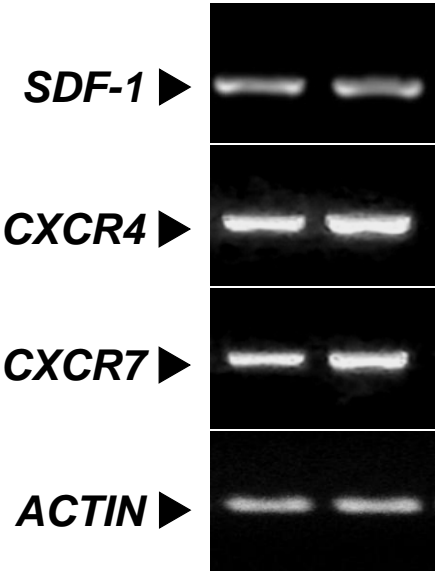
Effects of linagliptin on cell growth of immortalized mesangial cells and podocytes. Immortalized human mesangial cells (A) or podocytes (B) were exposed to either vehicle alone or linagliptin (1 or 100 nM; 1-5 days), and cell growth was evaluated by determining cell number in each well. Data are expressed as mean \pm SEM of five experiments run in triplicate for each experimental group.



Effects of AMD3100 on growth of immortalized human podocytes. Immortalized human podocytes were exposed to vehicle alone (control, white bar), linagliptin, AMD3100 or linagliptin + AMD3100 for 5 days and cell growth was evaluated by determining cell number in each well. Data are expressed as mean \pm SEM of five experiments run in triplicate for each experimental group. Combined effects (dashed line) were predicted by assuming Bliss independence. * $P < 0.05$ vs. control group.



Effects of AZD6244 on growth of immortalized human podocytes. Immortalized human podocytes were exposed to vehicle alone (control, white bar), linagliptin, AZD6244 or linagliptin + AZD6244 for 5 days and cell growth was evaluated by determining cell number in each well. Data are expressed as mean \pm SEM of five experiments run in triplicate for each experimental group. Combined effects (dashed line) were predicted by assuming Bliss independence. * $P < 0.05$ vs. control group.



Expression of the gene encoding for SDF-1, CXCR4, and CXCR7 in immortalized mesangial cells. Expression was evaluated in immortalized mesangial cells by RT-PCR analyses. Image is representative of five experiments run in duplicate for each experimental group.

Table 1S

PCR primers used in this study.

Gene	Primers	Amplicon size (bp)
<i>DPP4</i>	F: 5' -GGCTGGTCATATGGAGGGTA-3' R: 5' -CAGGGCTTTGGAGATCTGAG-3'	288
<i>SDF-1</i>	F: 5' -AGAGCCAACGTCAAGCATCT-3' R: 5' -CTTTAGCTTCGGGTCAATGC-3'	111
<i>CXCR4</i>	F: 5' -CACTTCAGATAACTACACCG-3' R: 5' -ATCCAGACGCCAACATAGAC-3'	465
<i>CXCR7</i>	F: 5' -TGGTCAGTCTCGTGCAGCAC-3' R: 5' -GCCAGCAGACAAGGAAGACC-3'	495
<i>ACTIN</i>	F: 5' -TGACGGGGTCACCCACACTGTGCCCATCTA-3' R: 5' -CTAGAAGCATTTCGGGTGGACGATGGAGGG-3'	661