

Lin et al., <http://www.jcb.org/cgi/content/full/jcb.200608121/DC1>

The results of statistic analysis using the Kolmogorov-Smirnov test

For Fig. 1 D: SNG versus syndecan-2 shRNA, $D = 0.3763$ and $P < 0.001$; syndecan-2 shRNA versus syndecan-2 shRNA + syndecan-2 mutant, $D = 0.2371$ and $P < 0.001$. A total of 186 (SNG), 244 (syndecan-2 shRNA), and 291 (syndecan-2 shRNA + syndecan-2 mutant) dendrites were analyzed from two independent experiments.

For Fig. 2 B: GFP versus syndecan-2, $D = 0.9665$ and $P < 0.001$; syndecan-2 versus syndecan-2 + K5720, $D = 0.2368$ and $P = 0.015$; syndecan-2 versus syndecan-2 + H89, $D = 0.5385$ and $P < 0.001$; syndecan-2 versus syndecan-2 + PKI, $D = 0.4747$ and $P < 0.001$. A total of 45 (GFP), 89 (syndecan-2), 78 (syndecan-2 + K5720), 56 (syndecan-2 + H89), and 112 (syndecan-2 + PKI) immunoreactive cells were counted from at least two experiments.

For Fig. 2 D: GFP + GFP-actin versus syndecan-2, $D = 0.7383$ and $P < 0.001$; syndecan-2 versus syndecan-2 + H89, $D = 0.6007$ and $P < 0.001$. A total of 167 (GFP + GFP-actin), 363 (syndecan-2), and 87 (syndecan-2 + H89) neurites were analyzed from two experiments.

For Fig. 3 C: syndecan-2 versus syndecan-2 Δ 3, $D = 0.1111$ and $P = 0.79$; syndecan-2 versus syndecan-2 Δ 20, $D = 0.2737$ and $P = 0.008$; syndecan-2 versus syndecan-2 Δ 32, $D = 0.3990$ and $P < 0.001$; syndecan-2 versus syndecan-2 Δ C1, $D = 0.6752$ and $P < 0.001$; syndecan-2 versus syndecan-2 RK/AA, $D = 0.7130$ and $P < 0.001$; syndecan-2 versus syndecan-2 KD/AA, $D = 0.5667$ and $P < 0.001$. A total of 72 (syndecan-2), 60 (syndecan-2 Δ 3), 68 (syndecan-2 Δ 20), 66 (syndecan-2 Δ 32), 93 (syndecan-2 Δ C1), 81 (syndecan-2 RK/AA), and 82 (syndecan-2 KD/AA) immunoreactive cells were counted from at least two experiments.

For Fig. 3 E: syndecan-2 versus syndecan-2 Δ C1, $D = 0.4214$ and $P < 0.001$; syndecan-2 versus syndecan-2 Δ 3, $D = 0.1213$ and $P = 0.238$. A total of 172 (syndecan-2), 118 (syndecan-2 Δ 3), and 117 (syndecan-2 Δ C1) neurites were analyzed from two experiments.

For Fig. 6 C: syndecan-2 versus syndecan-2 + Jn, $D = 0.4336$ and $P < 0.001$; syndecan-2 + Jn versus syndecan-2 + Jn + FSK, $D = 0.3524$ and $P < 0.001$. A total of 420 (syndecan-2), 233 (syndecan-2 + Jn), and 183 (syndecan-2 + Jn + FSK) neurites from four experiments were analyzed.

For Fig. 7 C: syndecan-2 + nonsilencer versus syndecan-2 + NF1 shRNA, $D = 0.2502$ and $P < 0.001$; syndecan-2 + NF1 shRNA versus syndecan-2 + NF1 shRNA + FSK, $D = 0.2450$ and $P < 0.001$; syndecan-2 + nonsilencer versus syndecan-2 + NF1 shRNA + FSK, $D = 0.0683$ and $P = 0.285$. A total of 410 (syndecan-2 + nonsilencer), 291 (syndecan-2 + NF1 shRNA), and 410 (syndecan-2 + NF1 shRNA + FSK) neurites were analyzed from three independent experiments.

For Fig. 8 D: GFP + GFP-actin versus GFP + GFP-actin + FSK, $D = 0.0767$ and $P = 0.901$; GFP + GFP-actin versus GFP + GFP-actin + db cAMP, $D = 0.1294$ and $P = 0.353$. A total of 88 (GFP + GFP-actin), 135 (GFP + GFP-actin + FSK), and 114 (GFP + GFP-actin + db cAMP) neurites were analyzed from two independent experiments.

For Fig. 9 D: syndecan-2 + FP4-mito versus syndecan-2 + AP4-mito, $D = 0.2714$ and $P < 0.001$; syndecan-2 + FP4 versus syndecan-2 + FP4 + FSK, $D = 0.0658$ and $P = 0.593$. A total of 366 (syndecan-2 + AP4), 285 (syndecan-2 + FP4), and 253 (syndecan-2 + FP4 + FSK) neurites were analyzed from five independent experiments.

For Fig. 10 B, protrusion density: syndecan-2 versus syndecan-2 Δ 3, $D = 0.1417$ and $P = 0.387$; syndecan-2 versus syndecan-2 Δ C1, $D = 0.5408$ and $P < 0.001$. Protrusion length: syndecan-2 versus syndecan-2 Δ 3, $D = 0.3036$ and $P < 0.001$. A total of 75 (syndecan-2), 64 (Δ C1), and 81 (Δ 3) neurites were analyzed from three independent experiments.

For Fig. 10 D: nonsilencer control versus NF1 shRNA, $D = 0.2602$ and $P < 0.001$. A total of 224 (nonsilencer) and 191 (NF1 shRNA) neurites were analyzed from two independent experiments.

For Fig. 10 F: FP4-mito versus AP4-mito, $D = 0.4708$ and $P < 0.001$. A total of 112 (AP4-mito) and 118 (FP4-mito) neurites were analyzed from three independent experiments.