ERRATUM



Erratum to: Antibody-mediated neutralization of myelin-associated EphrinB3 accelerates CNS remyelination

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The original article was published with the incorrect author group. The correct author group is provided below:

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It has also been noticed that Fig. 3c, d included erroneously duplicated images in the colour channels of the immunocytochemical stainings.

The correct image is given below.

The online version of the original article can be found under doi:10.1007/s00401-015-1521-1.

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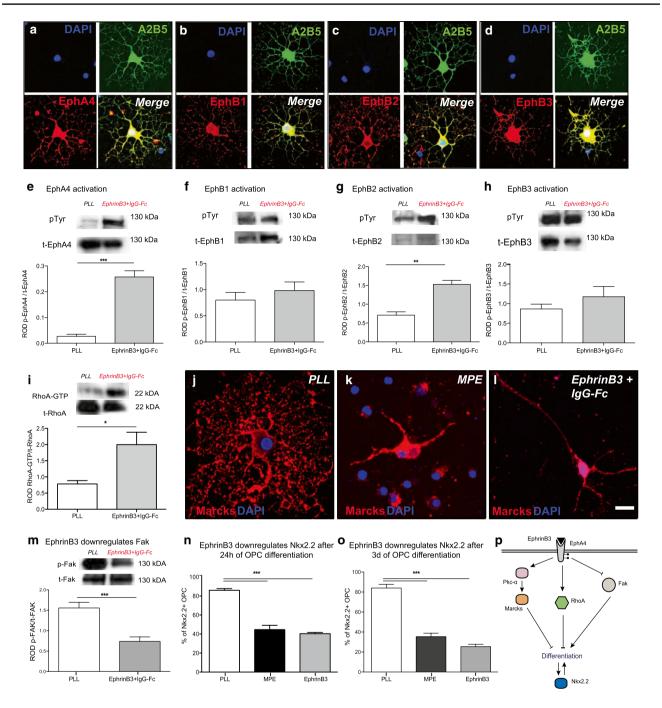


Fig. 3 EphrinB3 activates RhoA and Pkc-α, inhibits Fak, and decreases Nkx2.2 expression. **a**–**d** OPCs in culture for 48 h expressed EphA4, EphB1, EphB2 and EphB3 receptor tyrosine kinases (RTKs). **e**–**h** EphrinB3-induced phosphorylation of EphA4 and EphB2 RTKs in OPCs [immunoprecipitation followed by WB, *pTyr* phosphorylated Eph-RTK, *t-Eph* total Eph-RTK, quantification of phosphorylated Eph-RTK relative to total Eph-RTK (ROD), *n* = 3: *t* test; EphA4 ****P* < 0.05; EphB1 *P* > 0.1; EphB2 ***P* < 0.01; EphB3 *P* > 0.1]. **i** Furthermore, EphrinB3-induced RhoA activity in OPCs (24-h differentiation; quantification of RhoA-GTP relative to RhoA-GDP (ROD), *n* = 3: ANOVA; **P* < 0.05). **j**–**l** Whilst Marcks is localized at the membrane in differentiating OPCs cultured on control substrates, EphrinB3-mediated activation of Pkc-α resulted in phosphorylation and membrane-to-cytosol translocation of Marcks. **m** EphrinB3 also

inhibited the activation of Fak [quantification of phosphorylated (p-) Fak relative to total (t-)Fak: (ROD), n = 3; t test; **P < 0.001]. **n**, **o** Similar to MPE, EphrinB3 inhibited Nkx2.2 expression in OPCs (24-h differentiation, n = 3; ANOVA; ****P < 0.0001; Dunnett's post hoc test PLL vs. MPE: P < 0.001; PLL vs. EphrinB3: P < 0.001; 3-day differentiation, n = 3; ANOVA; ****P < 0.0001; Dunnett's post hoc test PLL vs. MPE: P < 0.001; PLL vs. EphrinB3: P < 0.001, **p** Proposed model of EphrinB3 signalling regulating OPC differentiation: the presence of EphrinB3 activates EphA4 and EphB2-RTKs. This results in activation of RhoA and Pkc- α signalling, both known to inhibit OPC differentiation. EphrinB3 also inhibits Fak signalling, a positive regulator of OPC differentiation. Failed differentiation is associated with reduced expression of Nkx2.2. *Error bars* \pm SEM. *Scale bar* in **a**– **d** = 40 μ m, **j**–**l** = 20 μ m