

CORRIGENDUM

C9ORF72, implicated in amyotrophic lateral sclerosis and frontotemporal dementia, regulates endosomal trafficking

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The authors have identified that the image of internalised TrkB receptor control and siRNA (top panel) in Figure 5E was presented incorrectly. They provide here a new corrected image, which it can be seen is very similar to the incorrect image originally shown. The correct image clearly demonstrates a reduction in the intensity of internalized TrkB receptor in C9orf72-siRNA treated cells, as described. None of the conclusions were affected by this minor error as all quantification was performed using the correct blot.

In addition, the Authors identified that the legend from Figure 7C was originally omitted. This legend has now been inserted into the corrected figure legend for Figure 7 as below:

Figure 7: C9ORF72 colocalizes with hnRNPA1, hnRNPA2/B1, ubiquilin-2 and actin. (A) Neuro2a cells were treated with 10 μ M lactacystin for 16 h. Both treated and untreated cells were immunostained with anti-C9ORF72 (red) and anti-ubiquilin-2 antibodies (green) and stained with DAPI to locate the nucleus (blue). White arrow in the merge image shows areas of colocalization of ubiquilin-2 and C9ORF72. Scale bar: 10 μ m, applied to all fields. Lac, lactacystin. (B) Inhibition of the proteasome by lactacystin promotes the colocalization of C9ORF72 and ubiquilin-2. (C) Mander's coefficient was used to calculate the degree of colocalization between C9ORF72 and ubiquilin-2. Data are represented as mean \pm SEM; **P < 0.001 versus untreated cells by unpaired t-test. (D) Ubiquilin-2 coprecipitates using anti-C9ORF72 antibodies in Neuro2a cells, revealed by immunoblotting for ubiquilin-2. Control immunoprecipitations using buffer only or irrelevant, isotype matched control IgG antibody indicates there is no non-specific cross-reactivity. (E) Immunocytochemistry of SH-SY5Y cells using anti-C9ORF72 antibodies (green), anti-hnRNPA1 or anti-hnRNPA2/B1 antibodies (red). White arrow indicates the colocalization between C9ORF72 and hnRNPA2/B1 and hnRNPA1; scale bar: 10 μ m. (F) hnRNPA1 coprecipitates using anti-C9ORF72 antibodies in SH-SY5Y cells, revealed by immunoblotting with anti-hnRNPA1 or anti-hnRNPA2/B1 antibodies. Control immunoprecipitations using buffer only or irrelevant, isotype-matched control IgG antibody indicate there is no non-specific cross-reactivity. (G) Colocalization of C9ORF72 (red) and actin (green) in neuro 2a cells and stained with DAPI to locate the nucleus (blue), white arrows indicate areas of colocalization. Inset demonstrates higher magnification (x100) of the areas highlighted to illustrate colocalization. Scale bar: 10 μ m.

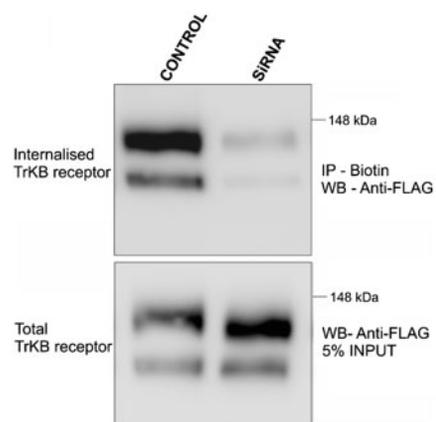


Figure 5E. New figure 5E.