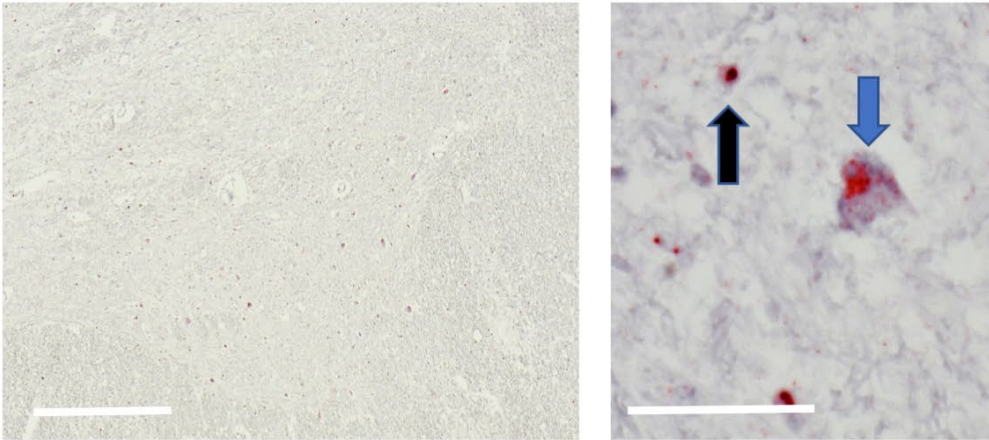
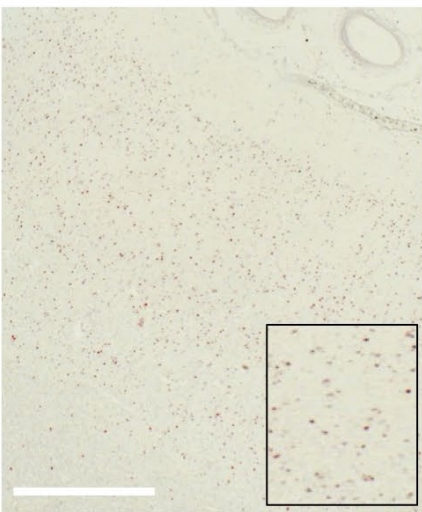


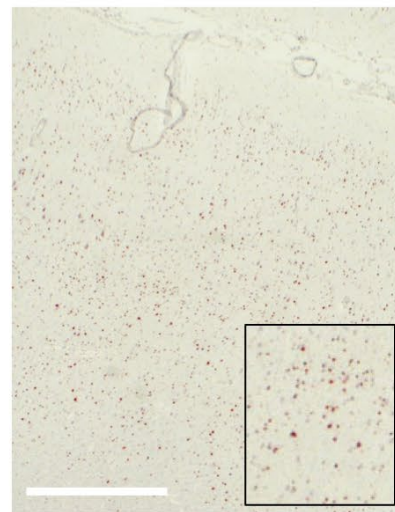
A



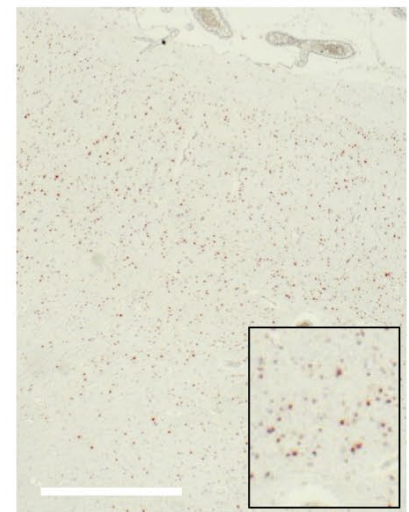
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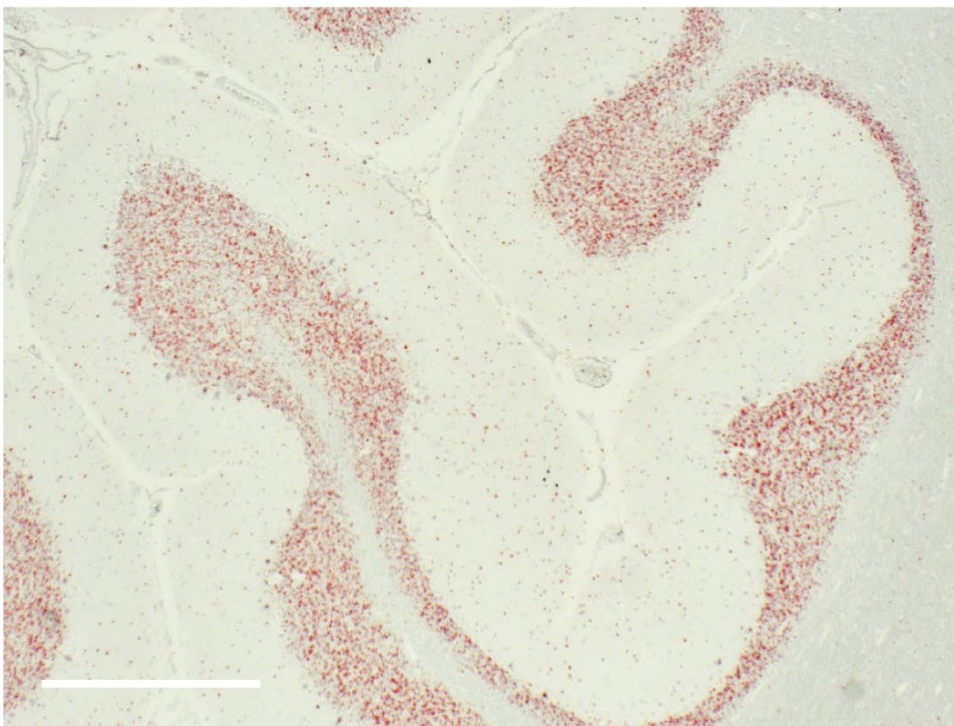
C



D



E



***Supplementary Figure 1. BaseScope™ images taken at low magnification (2x and 4x) demonstrate improved detection of RNA foci***

Representative images of **A.** Anterior horn of spinal cord (*left*: low magnification [4x], *right*: high magnification [40x]). Scale bar = 0.5 mm on left and 50 µm on right. Blue arrow points to a motor neuron and black arrow points to a glial cell. **B.** Motor cortex; **C.** BA44/45; **D.** BA46 and **E.** Cerebellum (note particularly prominent staining in the granular cell layer) of *C9orf72*-ALS patients, demonstrating clearly visible RNA foci at low magnification. All images of cortex (B-E) taken at 2x magnification. Scale bar = 1 mm. Note reduced staining of haematoxylin counterstain resulting from DNase pretreatment.