## RAW DATA FIGURE 3 Fig 3

Figure 3A

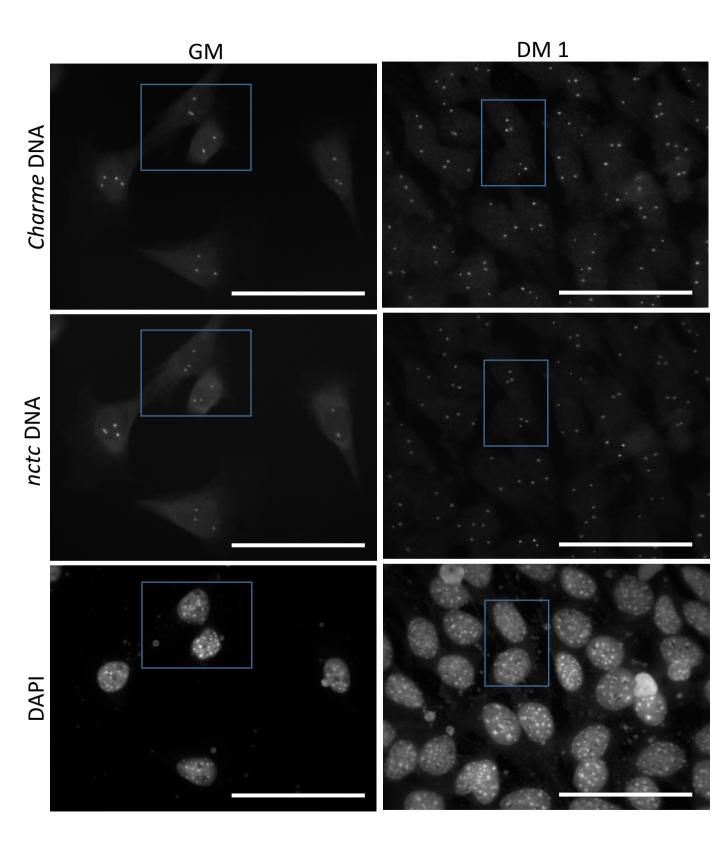
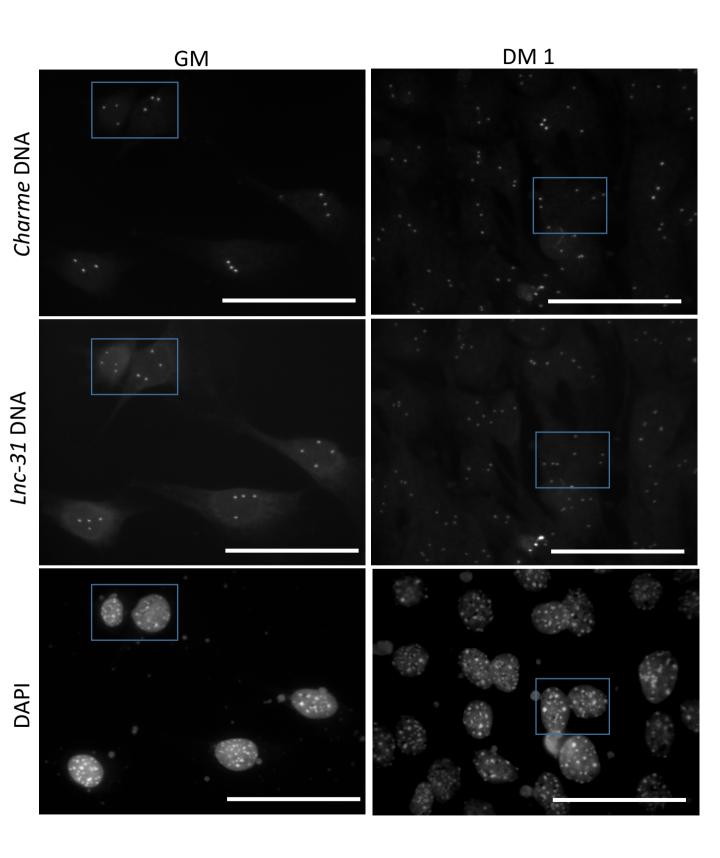
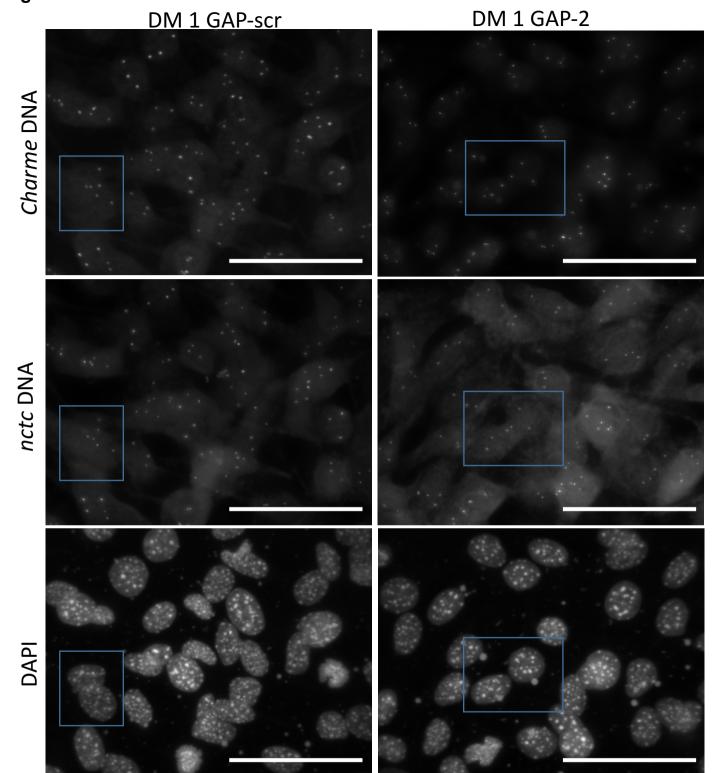


Figure 3A





Full size confocal images of DNA/DNA FISH for *Charme* and *nctc* genomic regions and **DAPI** (4',6-diamidino-2-phenylindole) in proliferating (GM) and differentiated (DM1 and DM1,5)  $C_2C_{12}$  cell cultures.

The images were acquired as 16 bit depth with a resolution XY of 0,075 micron, by using a UPLANSApo 60 X oil objective (NA 1.35) and collected with MetaMorph software (Molecular Devices). Stacks of images were taken automatically with 0,2 micron between the Z-slices.

The images were processed in post-acquisition analysis with FIJI software and all adjustement were applied to the entire image.

DNA FISH 16 bit Z-stacks were processed with a Laplacian of Gaussian filter (sigma XYZ 3px) to enhance the spots signal over background and color balance was manually adjusted using MetaMorph or ImageJ softwares setting a reference value considering the without specific staining as a background.

All Z stacks were merged with maximum intensity projection and combine in multicolour image. Blue square: area enlarged in the figure. Scale bar =  $50 \mu m$ .