

# Supplemental\_Figure\_S1. Concentric arrangement of the main chromatin classes in rod nuclei and classification of BAC signals

**A**, The main chromatin classes have a concentric arrangement in mouse rod nuclei. Chromocenter (cHC), *dark grey*; L1 zone (HC), *light grey*; B1-zone (EC), *white*. FISH signals (*blue dots*) in rod nuclei are classified according to their co-localization within the three concentric shells formed by the main chromatin classes.

**B,C**, FISH with BAC probes combined with immunostaining for euchromatin (B) and heterochromatin (C). B1-zone and L1-zone were detected using antibodies against H3K4me3 and H4K20me3, respectively. Signals of the gene-depleted BAC RP23-421B15 are located in the L1-zone or adjacent to the chromocenter. Signals of the gene-rich BAC RP23-340I3 are positioned in the B1-zone or at the B1/L1 border. Top panels: DAPI, *red*; histone immunostaining, *green*, FISH signal, *blue*; bottom panels: grey scale images of DAPI with superimposed BAC signals (*blue*). Classification of signals based solely on DAPI staining conforms well to that based on co-localization with histone modification staining. Arrows point to the BAC signals. Single optical sections. Scale bar: 2  $\mu$ m

