

Extended Data Figure 5 | Subgroup-specific enhancers of ependymoma.

a, b, Heatmap of all subgroup-specific active enhancers detected in ependymomas in independent samples in the Heidelberg (n=24 independent samples) (a) and Toronto (n=18 independent samples) (b) cohorts. c, Box plot of gene expression for ependymoma SE-SSEA-associated genes in the Heidelberg cohort (n=24 independent samples). Comparisons were made using a two-sided Wilcoxon rank-sum test. Box plots show the centre (median), upper and lower quartile range, and dotted lines indicate minima and maxima. d-f, Venn diagrams of the number and percentage of subgroup-specific super-enhancer-associated loci validated between the Heidelberg and Toronto cohorts. g, h, Non-negative factorization of ependymoma super enhancer profiles in the Heidelberg (n=24 independent samples) and Toronto (n=18 independent samples) cohorts. i, Normalized H3K27ac profiles for

subgroup-specific genomic example loci in the Heidelberg cohort with at least three biological replicates per subgroup, with the exception of ST-EPN-SE, shown as a biological duplicate. j, G-Profiler pathway-enrichment analysis of ependymoma subgroup-specific super-enhancer-associated genes in the Heidelberg cohort (n=24 independent samples) with statistical significance determined using a hypergeometric test. $\mathbf{k-n}$, H3K27ac profiles surrounding the EPHB2 (\mathbf{k}) and CCND1 (\mathbf{m}) loci in the Heidelberg cohort with at least three biological replicates per subgroup, with the exception of ST-EPN-SE, shown as a biological duplicate. EPHB2 (\mathbf{l}) and CCND1 (\mathbf{n}) expression by RNA-seq across ependymoma subgroups in the Heidelberg cohort with horizontal bars indicating the median value and each dot representing an independent ependymoma sample (n=24 independent samples).