

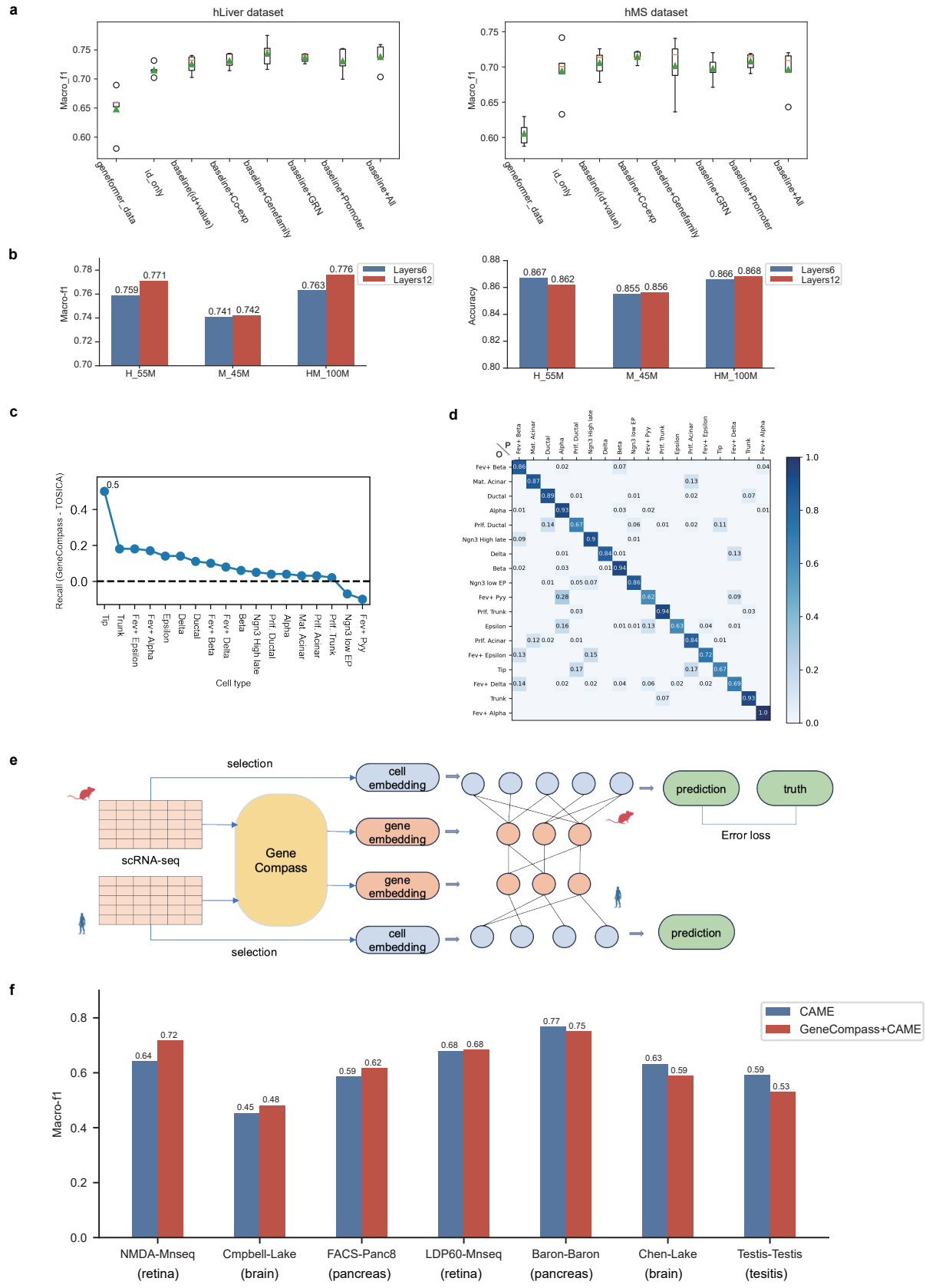


Fig. S5| Prior knowledge ablation and results of cell type annotation. **a**, The ablation study of four kinds of prior knowledges used for GeneCompass in the hMS dataset, where “+All” implies that all prior knowledges are concatenated. **b**, Ablation study of GeneCompass transformer layers in the hMS dataset. “layers6” and “layers12” denote self-attention transformer with 6 layers and 12 layers, respectively. **c**, Differences in recall between GeneCompass and TOSICA for different cell types in the mPancreas dataset. **d**, GeneCompass confusion matrix on the mPancreas dataset. **e**, Gene embedding of GeneCompass is integrated into CAME for cross-species cell-type annotation. **f**, The macro-f1 of cross-species cell-type annotation from mouse to human by using GeneCompass+CAME and CAME.