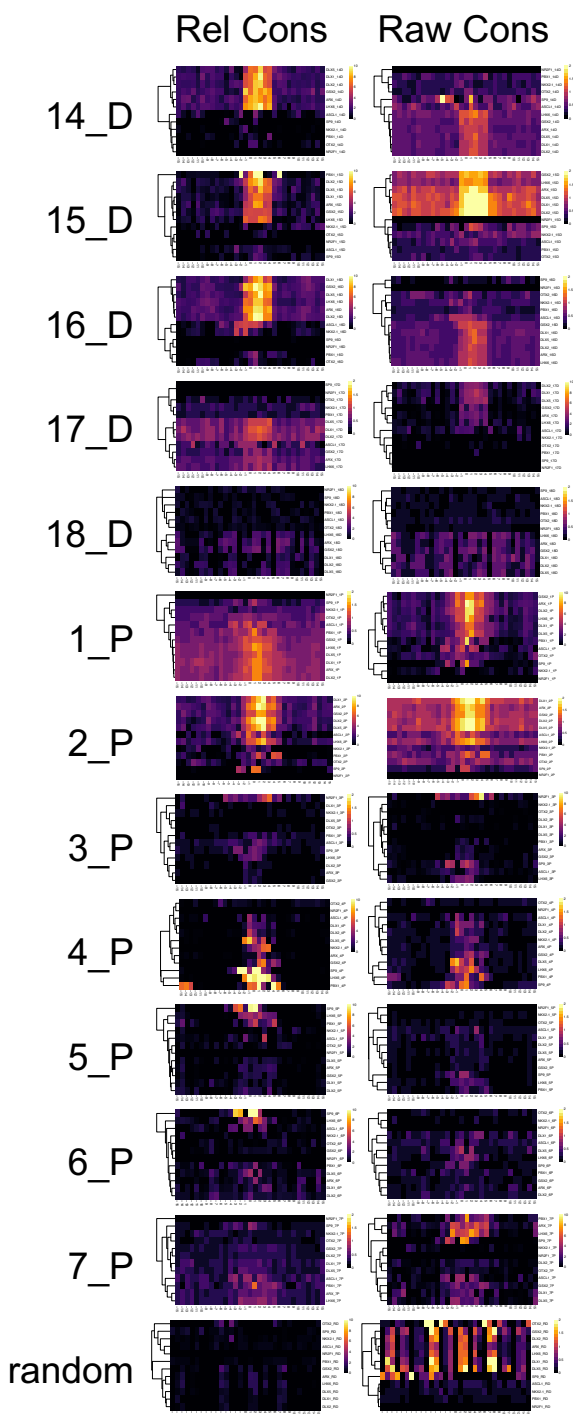
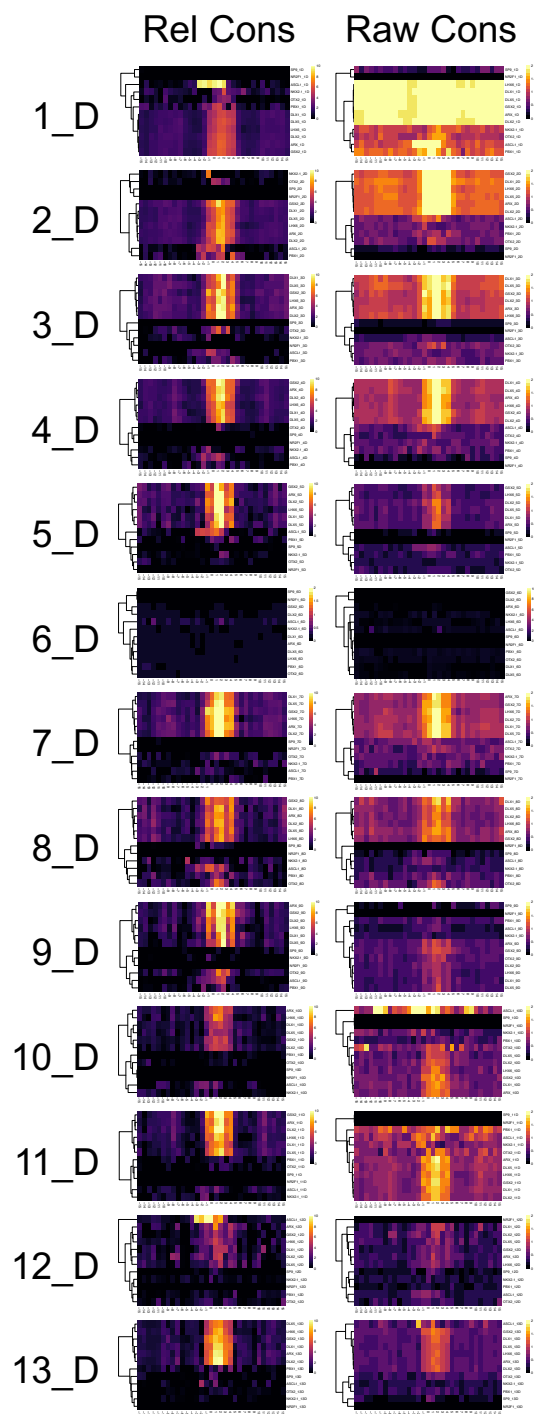


## Supplementary Figure S5

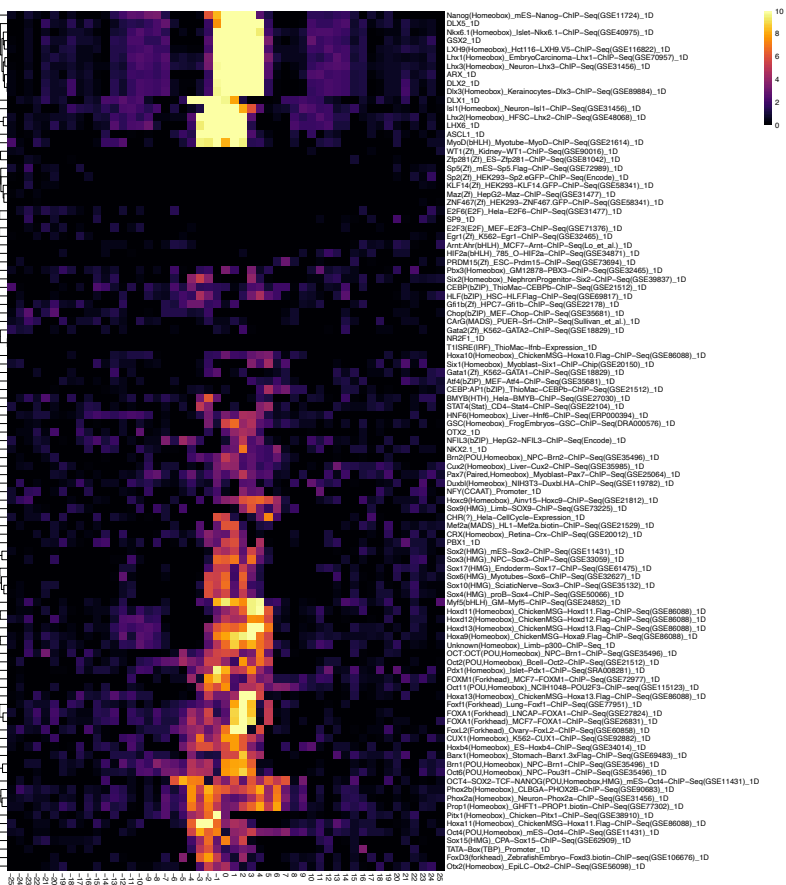
**Average base-level PhyloP vertebrate evolutionary conservation of motifs within pRE clusters. (a)** Average base-level conservation for Primary TF motifs identified in this study for each pRE cluster. Values calculated by centering on each motif instance for all loci within pRE cluster and then calculating average value at that relative position. Left plots show row centered and scaled normalized Z-score representation of PhyloP scores. Right plots show raw average PhyloP values. Relative plots useful for comparing change in conservation between motif and neighboring sequence, whereas raw values capture background conservation versus change within motif. **(b)** Base-level conservation across all HOMER motifs that are enriched within 1\_D cluster. Calculated in same manner as for (a).

a



b

Relative Conservation



Raw Conservation

