**Chromatin profiles** H2AFZ H3K27ac H3K27me3 H3K36me3 H3K4me1 0.550 0.62 0.50 0.66 0.61 0.49 0.52 0.525 0.64 0.60 0.48 0.62 0.500 0.50 0.47 0.59 0.60 0.475 0.48 0.46 0.58 0.58 0.450-**Chromatin profiles** H3K4me2 H3K4me3 H3K9me3 H4K20me1 H3K9ac 0.56 0.48 0.60 0.68 0.68 0.54 0.66 0.45 0.66 0.58 0.52 0.64 0.42 0.56 0.50 0.62 0.62 0.48 0.39 0.54 0.60 0.46 0.60-MCC Genome origin **Splicing** ΑII Four kingdom Plasmid Acceptors Donors 0.65-0.55 0.9 0.9 0.9 0.50 0.60 0.45 0.8 0.8 0.55 0.40 0.7 0.7-8/05 1638A Regulatory elements **Enhancers** Enhancers (types) Promoter (no TATA) Promoter all Model Size (M) 0.50-0.54 75 0.775 0.77 100 0.48 0.75 0.52 0.750 **Evaluation Set** 0.73 0.46 0.725 0.71 validation 0.50 test 0.44 0.69 Model Type 8/02r 1638A 8/05 32768 32168 8/02 1638ty DeBERTa NT Vocabulary Size **ESM**