3.1.

There are 95314 peaks.

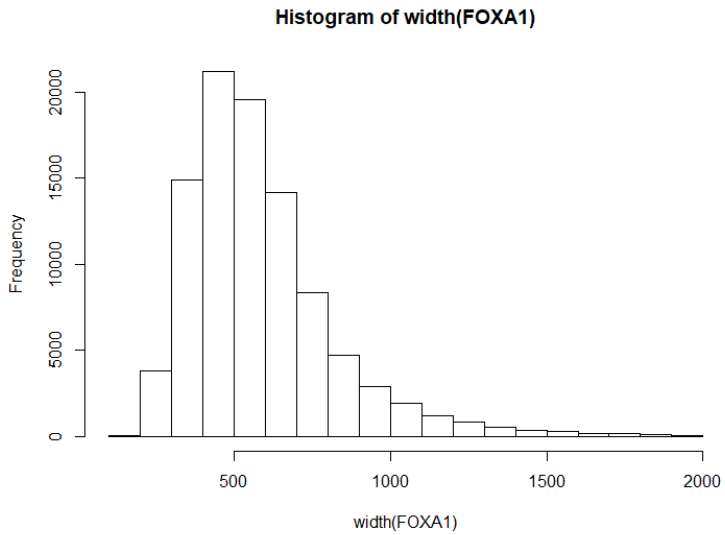
3.2.

mean: 594.9364

median: 538

max: 98453

3.3.



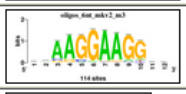
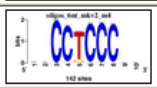
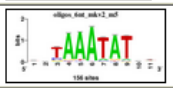
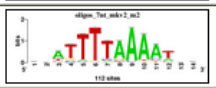
4.3.

There are 8188 Overlaps.

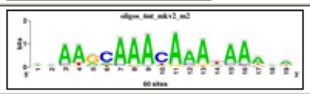
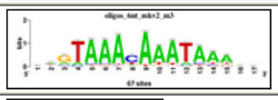
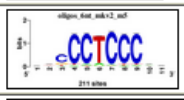
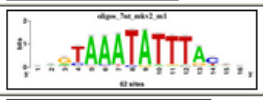
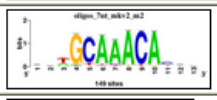
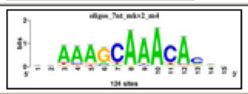
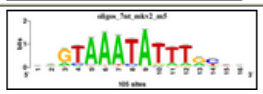
```
> findOverlaps(ER, FOXA1)
Hits object with 8188 hits and 0 metadata columns:
         queryHits subjectHits
         <integer>   <integer>
     [1]         3          18
     [2]         5          19
     [3]         6          20
     [4]        15          26
     [5]        16          28
     ...       ...         ...
  [8184]     12962       94809
  [8185]     12963       94809
  [8186]     12964       94810
  [8187]     12970       94817
  [8188]     12973       94830
  -------
  queryLength: 12999 / subjectLength: 95000
```

6.

8.2.

Motif	Logo	3 Top hits in databases
oligos_6nt_mkv2_m1		versus jaspar_core_nonredundant_vertebrates: NR2F1, NR2F2, NR4A1,
oligos_6nt_mkv2_m2		versus jaspar_core_nonredundant_vertebrates: NR2F1, PAX5, RORB,
oligos_6nt_mkv2_m3		versus jaspar_core_nonredundant_vertebrates: ELF5, EWSR1_FLI1, SPIB,
oligos_6nt_mkv2_m4		versus jaspar_core_nonredundant_vertebrates: SP1, ZNF740, KLF5,
oligos_6nt_mkv2_m5		versus jaspar_core_nonredundant_vertebrates: Arid5a, FOXB1, FOXC1,
oligos_7nt_mkv2_m1		versus jaspar_core_nonredundant_vertebrates: RORA, RORC, RORA_var_2_,
oligos_7nt_mkv2_m2		versus jaspar_core_nonredundant_vertebrates: LIN54,
oligos_7nt_mkv2_m3		versus jaspar_core_nonredundant_vertebrates: NR2F2, NR4A1, Esrrg,
oligos_7nt_mkv2_m4		versus jaspar_core_nonredundant_vertebrates: FOXP2, FOXP1, FOXO3,
oligos_7nt_mkv2_m5		versus jaspar_core_nonredundant_vertebrates: FOSB_JUN, FOSL2_JUN_var_2_, CREB1,

8.3.

Motif	Logo	3 Top hits in databases
oligos_6nt_mkv2_m1		versus jaspar_core_nonredundant_vertebrates: FOXK1, FOXA1, FOXP1,
oligos_6nt_mkv2_m2		versus jaspar_core_nonredundant_vertebrates: FOXA1, Foxj3, FOXC2,
oligos_6nt_mkv2_m3		versus jaspar_core_nonredundant_vertebrates: Foxj3, FOXP2, FOXP1,
oligos_6nt_mkv2_m4		versus jaspar_core_nonredundant_vertebrates: MZF1,
oligos_6nt_mkv2_m5		versus jaspar_core_nonredundant_vertebrates: SP1, KLF5, ZNF740,
oligos_7nt_mkv2_m1		versus jaspar_core_nonredundant_vertebrates: Arid5a, FOXB1, FOXC1,
oligos_7nt_mkv2_m2		versus jaspar_core_nonredundant_vertebrates: FOXP1, FOXK1, FOXC2,
oligos_7nt_mkv2_m3		versus jaspar_core_nonredundant_vertebrates: FOXP1, FOXK2, FOXP2,
oligos_7nt_mkv2_m4		versus jaspar_core_nonredundant_vertebrates: FOXA1, FOXF2, Foxj3,
oligos_7nt_mkv2_m5		versus jaspar_core_nonredundant_vertebrates: Arid5a, FOXB1, FOXC1,

9.2.

Es stechen 2 Sequenzen hervor: zum einen AGGTCAC relativ am Anfang immer und am Ende ist es TGACC