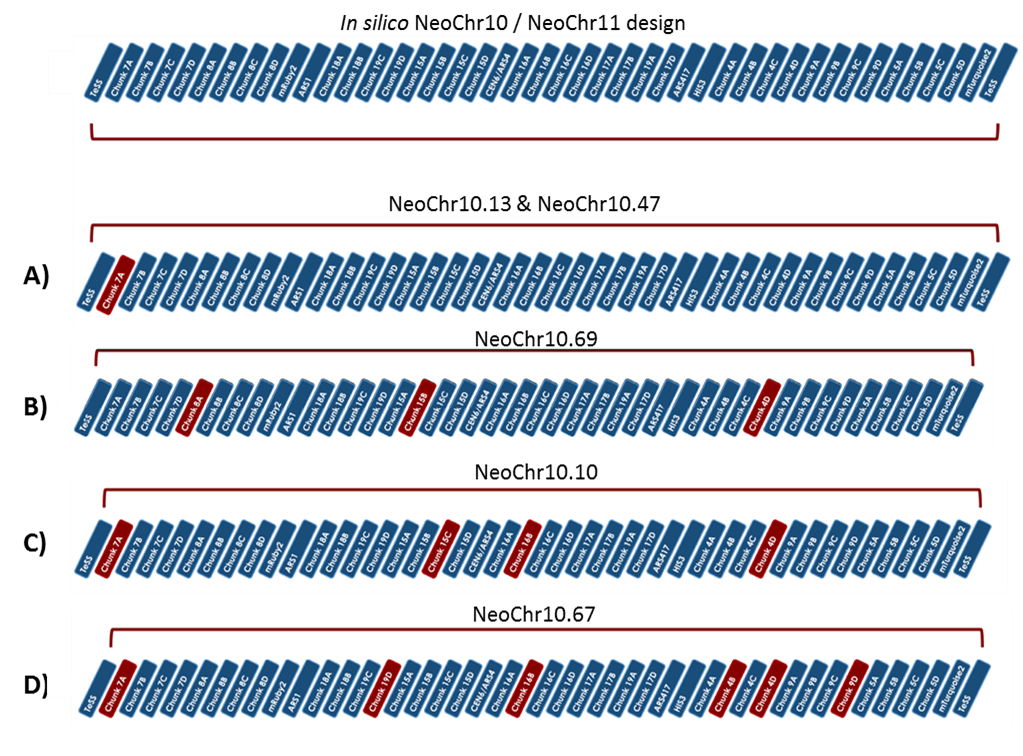
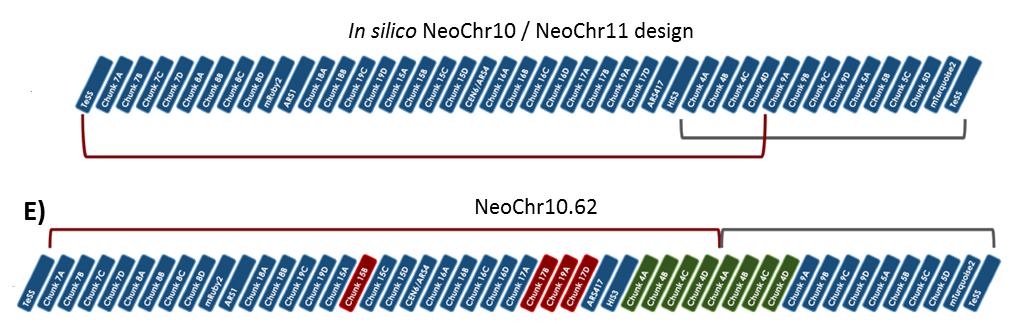
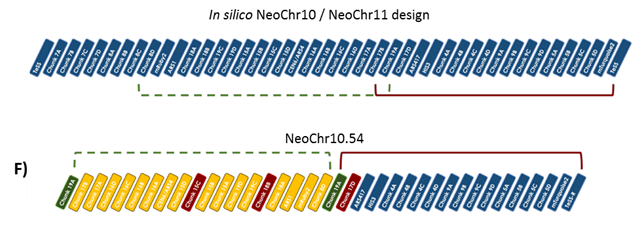
## Supplementary Figure - Sequencing results of test linear neochromosomes

*in silico* fragment configuration in NeoChr10 / NeoChr11 as well as *in vivo* fragment configuration of the neochromosome transformants as measured by long-read nanopore sequencing. The fragments of the *in silico* design which are present in the neochromosome transformants are connected by the same colored line. A dotted line indicates an area which is inverted. Fragments are color coded as follows: blue represents a correctly assembled fragment; red represents a missing fragment; green represents a duplicated fragment; and yellow indicates an inverted fragment.

A) NeoChr10.13 and NeoChr10.47 are missing an internal part of chunk 7A. B) NeoChr10.69 is missing 3 chunks: 8A, 15B and 4D. C) NeoChr10.10 is missing 4 chunks: 7A, 15C, 16B and 4D. D) NeoChr10.67 is missing 6 chunks: 7A, 19D, 16B, 4B, 4D and 9D

E) NeoChr10.62 is missing 4 chunks: 15B, 17B, 19A and 17D. In addition, a region containing the chunks 4A, 4B, 4C and 4D is duplicated

F) Neochr10.54 has a large inversion from 8D until 19A, from this region 2 chunks are missing: 15C and 18B. This region is link to a region spanning from 19A (which is thus duplicated) until the right telomere. From this region chunk 17D is missing

G) NeoChr11.19 contains several duplicated and inverted areas, from one area chunk 16A is missing.

