**Supplementary information S4 (figure)** | **Platforms for assembling DNA encoding TALE repeat arrays**.

Aa-Ae | Standard cloning methods (e.g.—REAL and REAL-Fast) use commonly practiced restriction enzyme digestions and ligations. In the specific strategy shown, DNA fragments encoding single TALE repeat domains are assembled together in a serial hierarchical fashion. Ba-Bd | “Golden Gate” cloning methods enable the joining of multiple (up to ten) fragments in a single reaction using variable 5’ overhangs to drive the order of fragments ligated together. In the example shown, DNAs encoding subsets of 10 (Ba) and six TALE repeats (Bb) are first ligated together and then these subsets (Bc) are subsequently joined together to create a final 16-mer (Bd). Ca-Ce | Iterative ligations performed on a streptavidin-coated solid-phase surface enable long fragments of DNA encoding multiple repeats to be rapidly assembled (e.g.—the FLASH and ICA methods).