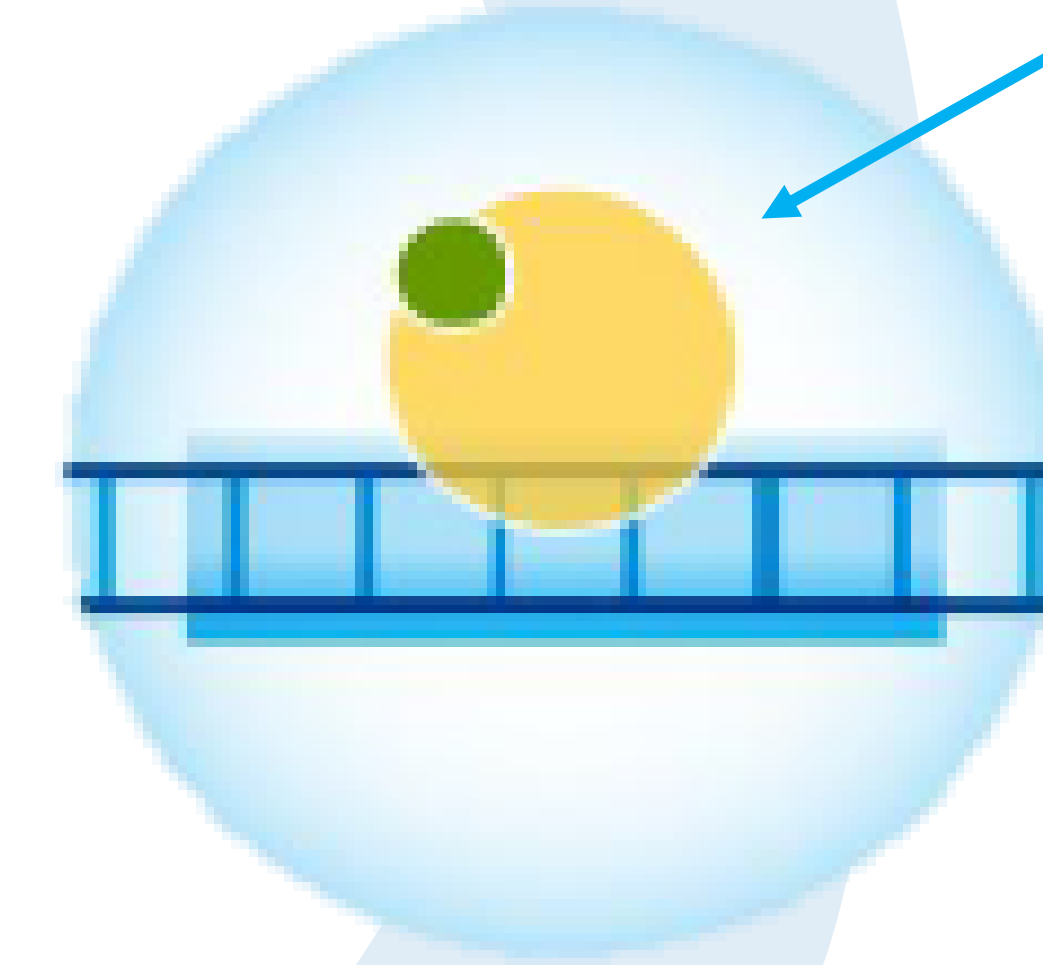
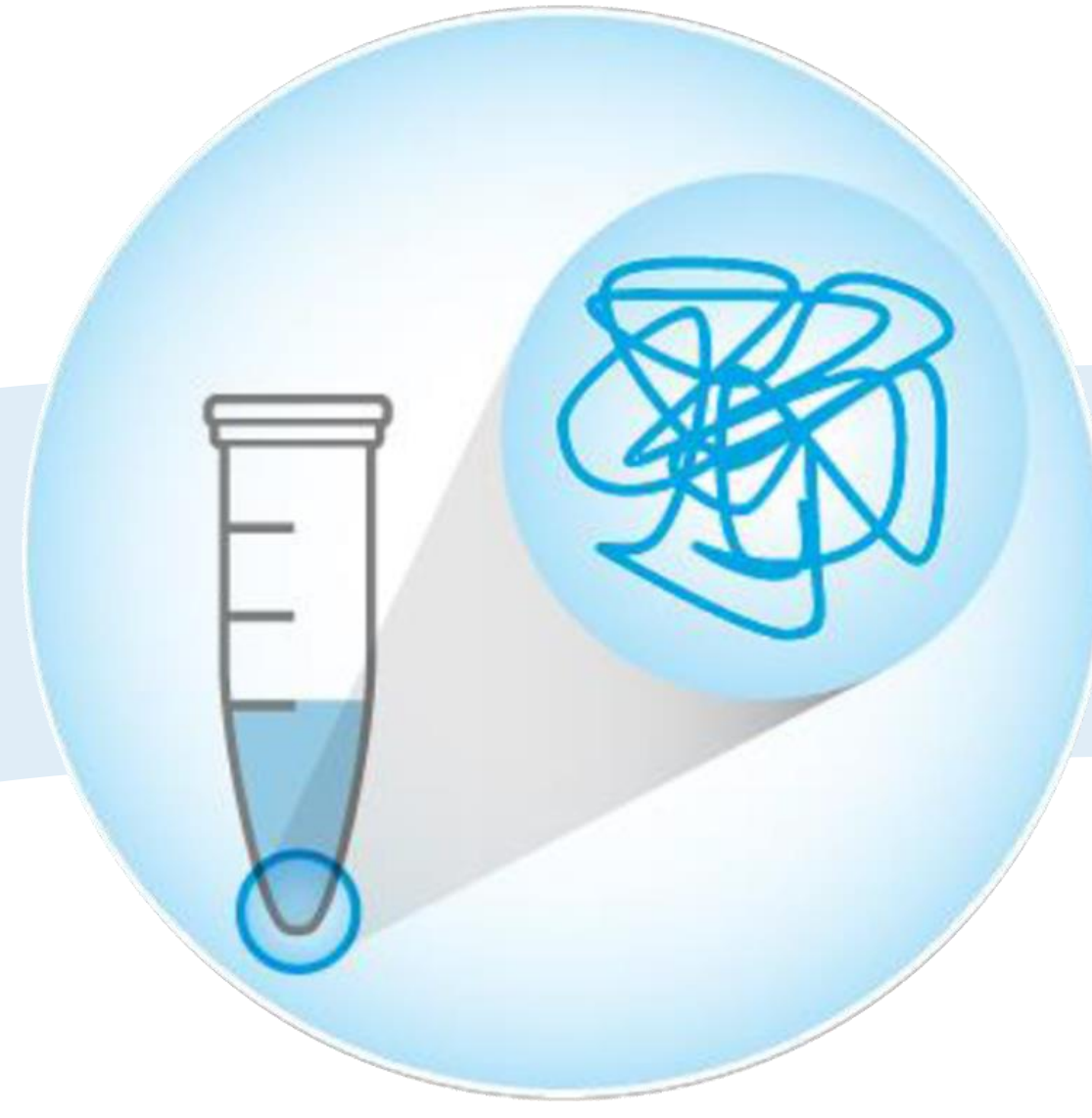




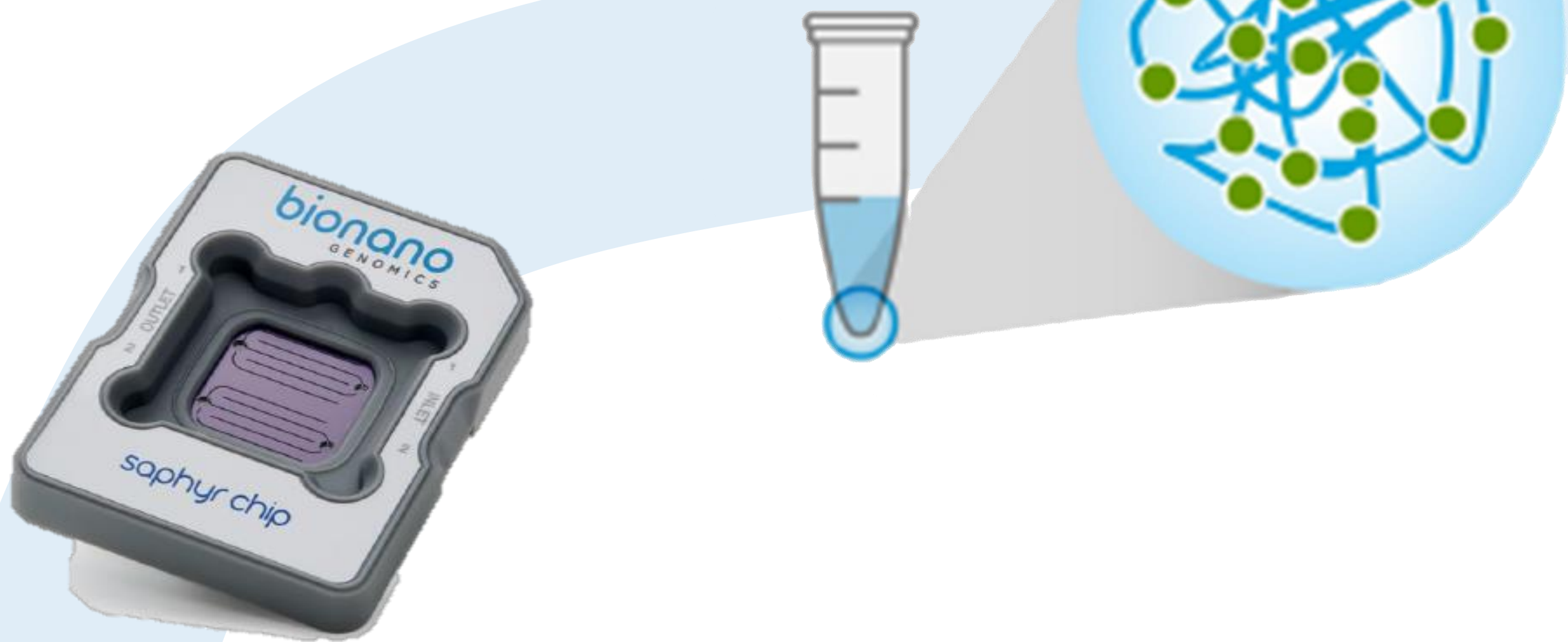
**Isolation of High Molecular Weight DNA**



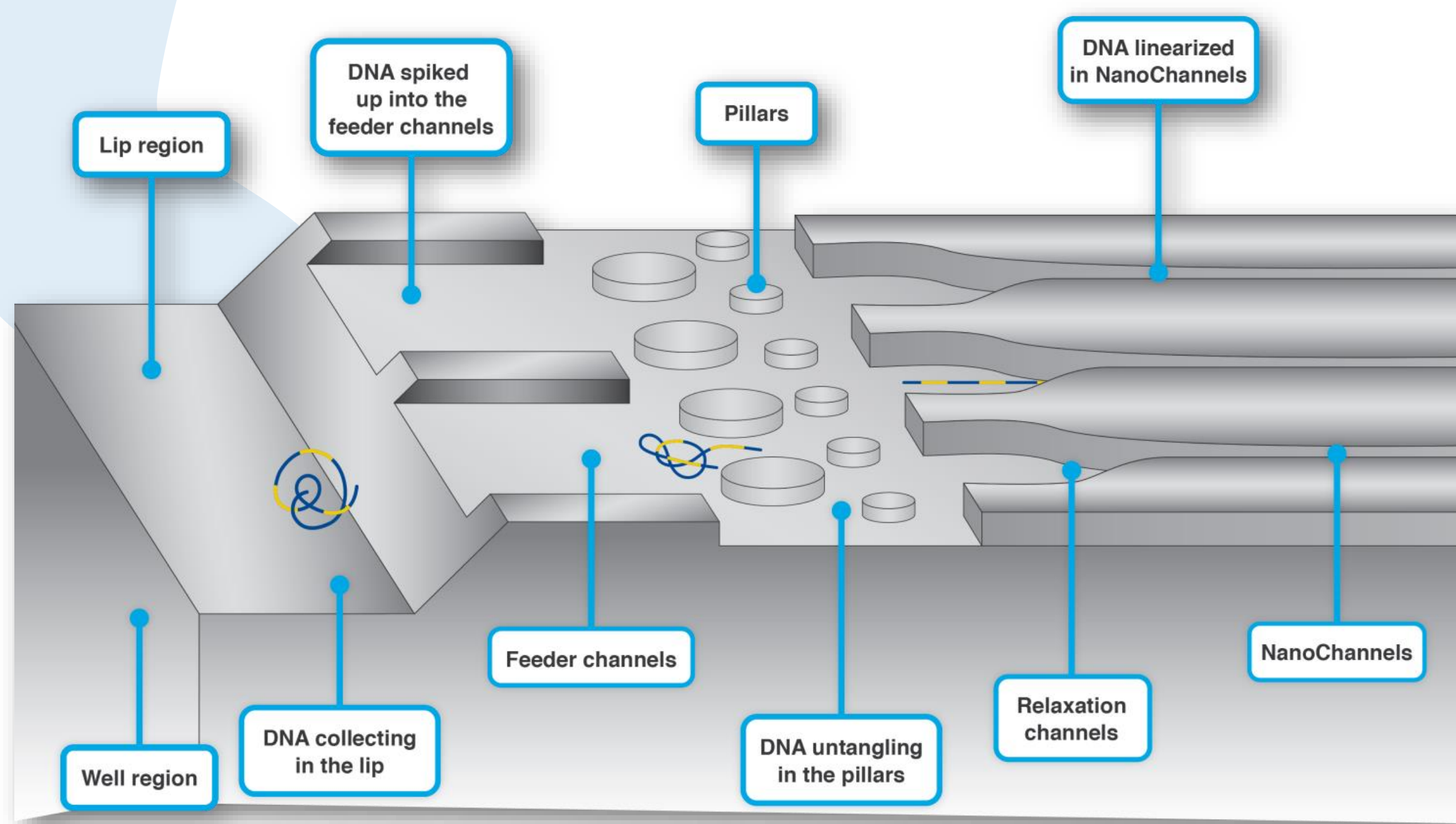
DLE enzyme

The DLE enzyme directly binds at recognition sites

The labeled DNA is stained with YOYO-1 and loaded on a chip



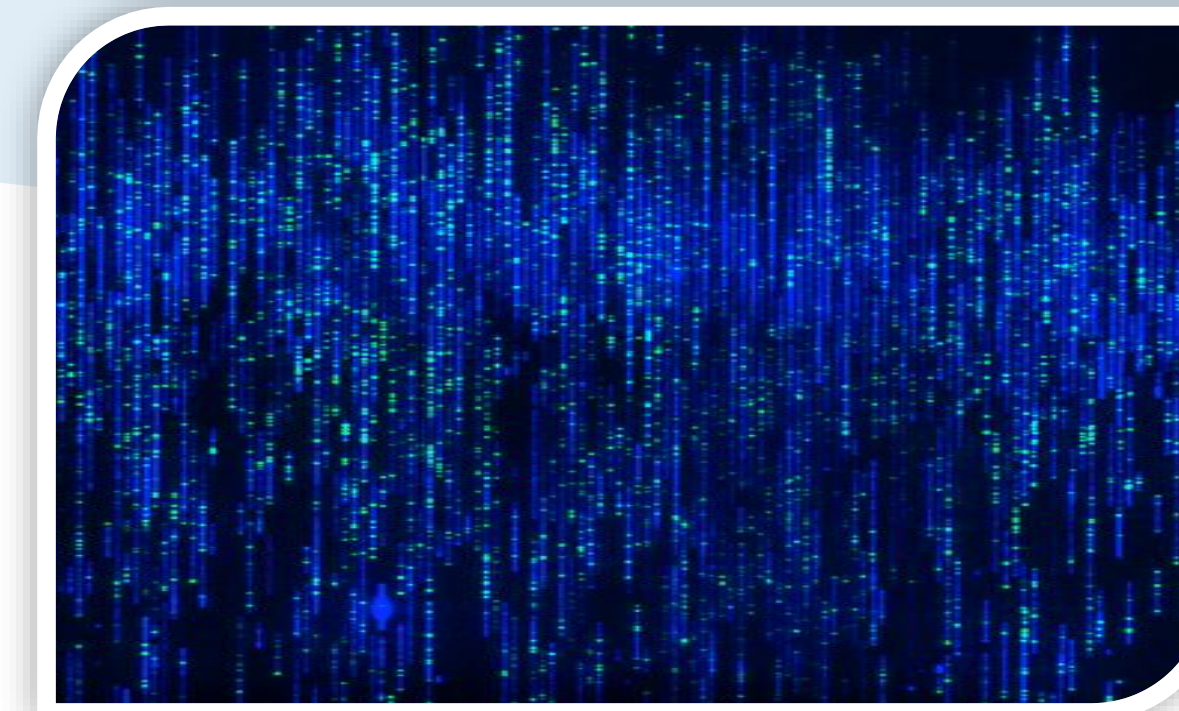
Fluorescent label is fixed to enzyme recognition sites



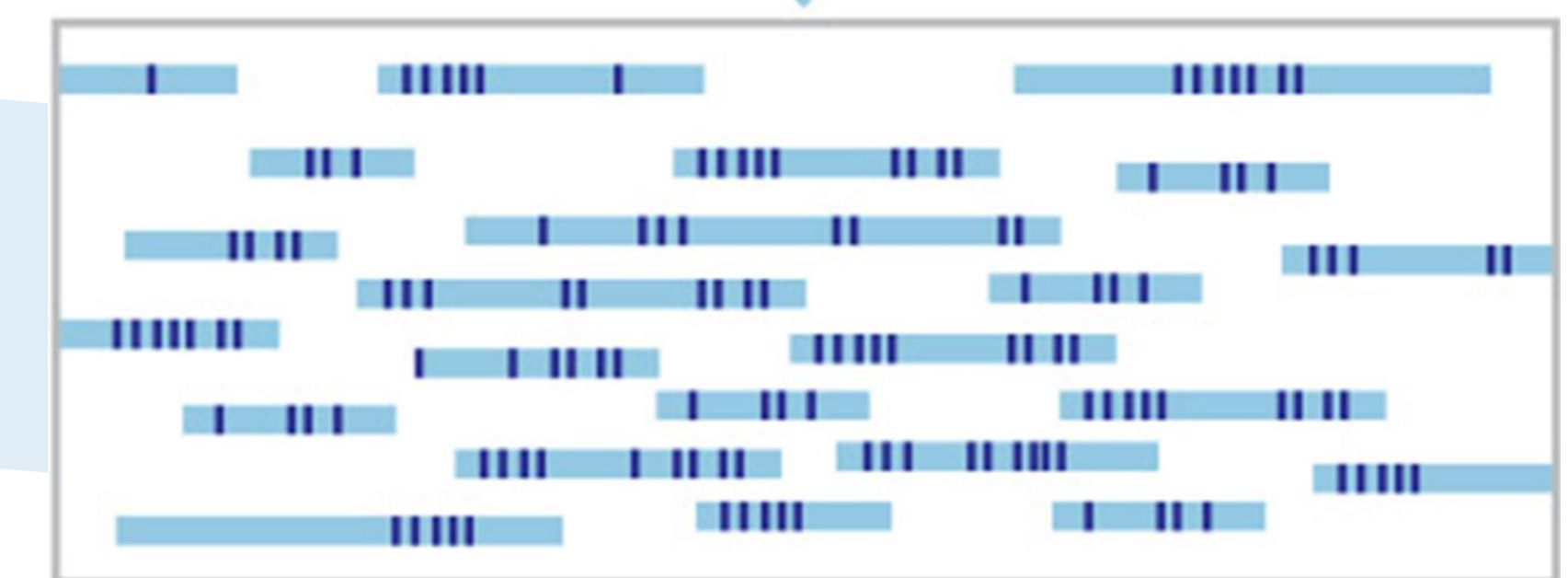
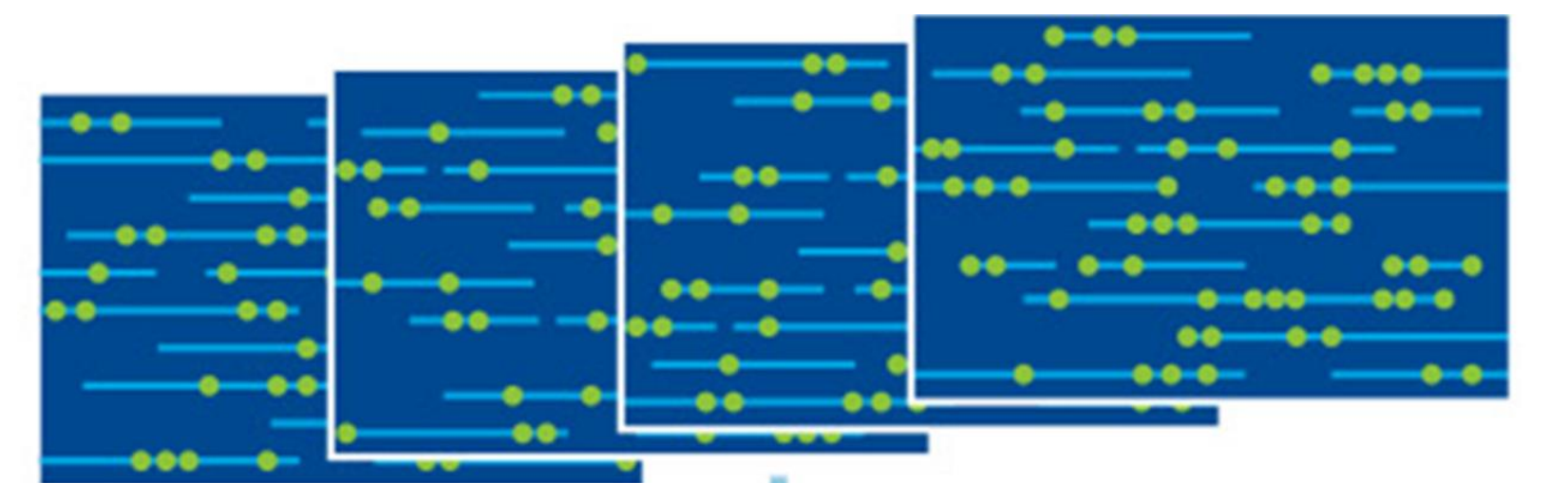
DNA molecules are linearized in the NanoChannels



The Irys System collects images of linearized DNA molecules



Algorithms convert images into digital molecules



De Novo assembly is made to construct a consensus genome map